Growing Up in Ireland
National Longitudinal Study of Children

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COHORT '98 (CHILD COHORT)

The *Growing Up in Ireland* Child Cohort Come of Age: Review of the Literature Pertaining to the 17/18 Year Wave

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Chapter 1

INTRODUCTION

1 INTRODUCTION

1.1 PURPOSE OF THIS REVIEW

Data from the third wave of interviews with the Child Cohort (recently renamed Cohort '98) at 17/18 years collected in 2015 provides scope for addressing a wide range of research questions. Some of these data will represent the latest outcomes for issues investigated at previous waves of the study, such as obesity and academic achievement, while others, such as employment, will be completely new avenues of investigation.

In this report we review the literature in 12 research areas for the 17/18-year phase; three each in four domains of economic and civic participation, socio-emotional well-being, education and health. Each review section is followed by suggestions for some specific questions that could be explored under this topic using the data collected in ***Growing Up in Ireland*** at this wave. Given the breadth of information collected in the study, the authors have decided to explore a selection of topics that relate to topics where data are available for the first time at this wave (e.g. sexual relationships) and/or that are particularly relevant to this stage of the life-course, such as the Leaving Certificate. It is not intended to be either exhaustive or prescriptive in terms of coverage but reflects literature that informed the survey development and should provide a useful background to further research in a number of key areas.

This document is part of a series of reviews reflecting earlier data collection waves for this cohort (i.e. at age 9 and 13 years) and the reader may wish to consult these earlier publications for additional reading on other topics relating to the ***Growing Up in Ireland*** Child Cohort.

1.2 ABOUT *GROWING UP IN IRELAND* AT 17/18 YEARS

Growing Up in Ireland is a longitudinal cohort study which means that the participants are of a similar age and the same individuals are followed up over time. The ***Growing Up in Ireland*** Child Cohort started with 8,500 9-year-olds in 2007. Nearly 7,500 of them completed follow-up interviews at age 13 years and just under 7,000 young people participated in the third wave in 2015/2016 at age 17/18 years.

The overall objective of the study is to provide information on the lives of children, young people and families to better inform government policy. As of the end of 2017, the ***Growing Up in Ireland*** study team had produced nearly 50 commissioned research outputs of various types and on a wide range of topics. In addition, there are dozens of other research outputs from the study which have been produced independently by researchers nationally and internationally. The original aims of ***Growing Up in Ireland*** since the study was established were as follows:

1. To describe the lives of Irish children, to establish what is typical and normal as well as what is atypical and problematic

2. To chart the development of Irish children over time, to examine the progress and wellbeing of children at critical periods from birth to adulthood

3. To identify the key factors that, independently of others, most help or hinder children's development
4. To establish the effects of early child experiences on later life
5. To map dimensions of variation in children's lives
6. To identify the persistent adverse effects that lead to social disadvantage and exclusion, educational difficulties, ill health and deprivation
7. To obtain children's views and opinions on their lives
8. To provide a bank of data on the whole child
9. To provide evidence for the creation of effective and responsive policies and services for children and families.

1.2.1 DATA COLLECTION

Most of the data at age 17/18 years were collected from the young people themselves. Interviewers visited the family homes and administered questionnaires to the 17/18-year-old and his/her resident parent(s). Most of the interview was face-to-face with the interviewer but participants were invited to self-complete more sensitive items on a separate questionnaire. Additional information collected in the home by the interviewer included:

- Height and weight (young person and parents)
- Blood pressure (young person only)
- Tests of cognitive ability (young person only)

At a later stage, questionnaires were sent to school Principals to collect information about the school currently or most recently attended by the young person. With parental consent, a postal questionnaire was sent to any biological parent resident elsewhere.

1.3 CONCEPTUAL FRAMEWORK

The bio-ecological model developed by Urie Bronfenbrenner (e.g. Bronfenbrenner and Morris, 2006) provides the core conceptual framework for ***Growing Up in Ireland***. This model and other theoretical approaches which influenced the original framework for the study's design are discussed in detail in an earlier ***Growing Up in Ireland*** publication (Greene et al., 2010) so will be just briefly summarised here.

Simply put, the bioecological model centres on interactions between the individual and their environment – including the people therein – and how they help to shape development. Those structures and people closest to the individual (the 'microsystem') will generally exert the most influence. For children, parents, siblings and school are typically the core elements of this

microsystem. However, the family does not exist in a vacuum so the individual's development can be influenced directly or indirectly by a wide range of other factors such as the local community (located in the 'exosystem'), and cultural norms, religious teachings, economic conditions and government policy to name a few examples in the 'macrosystem'. The model also includes the effect of interactions between those systems ('mesosystem'), such as the quality of the parents' marital relationship, and the individual's own characteristics like gender, health or personality. Time is represented in the bioecological model as both the historical context (such as global recession) and the timing of important events (like puberty and emigration).

At age 17/18 years, the microsystem of a young person growing up in Ireland typically continues to feature parents and school but has likely also expanded to include peers and perhaps college, work or partners.

Significant change is also expected in the individual's interactions with the wider community; not just in terms of geographically moving to a new community for work or study but also the nature of interactions with people in the community. In most cases, the traditional adult-child hierarchy will change and other adults in the individual's world will expect more of them in terms of societal contribution and behaviour management and theoretically allow them more say in matters that affect them.

At the macro level, the individual will continue to be affected by the national socio-economic situation but in different ways. Now, 17-18-year-olds will be more directly affected by Government policies in relation to issues like third-level education, employment, social welfare and housing and less impacted by, for example, changes to primary and second-level education. Likewise, they will have more direct interaction with State institutions in the arenas of education, training, social welfare, housing and employment; and more power to bring about change in the macro situation through voting (when 18) and engagement in political or social campaigns/civil society. The members of the Child Cohort can expect to be more directly affected by world events than when they were younger in terms of, for example, opportunities for foreign work and travel or indirectly through the impact of the global situation on the national or regional economy (e.g. the withdrawal of a large multi-national employer from their local area).

Bronfenbrenner's model recognises the importance of the individual in the course of their own development also. Sometimes these influences are characteristics that the individual can do little about even if they wished to do so; such as their age, ethnicity, temperament or genetic inheritance. In other areas, the individual can be a more active agent: choices of education pathways, being pro-active about their health and lifestyle, exerting self-control (or not) in relation to study and work, developing their own identity and choosing how to present that to the world. Over time some of these individual characteristics will, in turn, have been shaped by the earlier influences such as parenting style and learning in school. Cumulatively the individual's experiences, choices and outcomes up to the age of 17/18 play a key role in opportunities for, or constraints on, future development. Education is a key example: early learning, engagement at school, resources in the

home and classroom, subject choices and behaviour all potentially contribute to academic attainment in key State exams at age 17/18. The results in these exams are a key determinant of post-school education choices, on which subsequent occupational choices may depend. While options are in place for alternative routes to third-level qualifications, at this age a 'good' Leaving Certificate certainly opens many more doors going forward. Similarly, how the young adult will approach new relationships and attachments will likely be influenced by their relationships with family and peers throughout childhood and adolescence: for example, whether key attachments were secure or if they grew up to feel most people can be trusted based on their previous experience.

As regards time, national and international events will inevitably shape opportunities and perceptions to at least some degree. For the Child Cohort this age is a particularly significant time-point as it represents a major crossroads for the individual with decisions to be made in relation to third-level education or training or employment that have a high probability of shaping future occupation, income, social class and career fulfilment. It is a particularly interesting stage in the life-course for researchers.

The topic of emerging adulthood, including other perspectives on the transition, is discussed in more detail later in this review.

1.3.1 DOMAINS

Growing Up in Ireland is a multi-disciplinary study and so endeavours to collect a variety of information under the three principal domains of health and physical development, socio-emotional development, and education/cognitive development. To reflect the evolution in the 17/18-year-olds' environments and life-stage, a fourth domain of economic and civic participation was included for the first time at this wave. These domains and sample topics (both new and continuing) are illustrated in Table 1.

Table 1: ***Domains and sample topics for Growing Up in Ireland at 17/18 years***

Domain	Sample ongoing topics	Sample new topics
Health	Health conditions; general health status; parental health; health service utilisation; diet and exercise; smoking	Sexual health; obstacles to young person seeking medical advice; availing of HPV vaccine; blood pressure; medication details
Socio-emotional development	Behaviour (Strengths and Difficulties Questionnaire); psychotic symptoms; depression indicator; anti-social behaviour; experience of bullying; peers	Anxiety; self-harm; coping strategies; self-esteem; life satisfaction; eating disorders; boy/girlfriends; opposition to authority; discrimination
Education/cognitive development	Young person and parental aspirations for educational attainment; verbal ability; special educational needs; engagement with teachers	Junior and Leaving Certificate results; engagement/detailed plans for further or higher education; sources of information for making post-school choices; financial literacy
Economic and civic participation	Parental perception of local area; household socio-economic characteristics	Young person's employment and income; voluntary work; attitudes to State institutions; gender equality attitudes; driving licence; things considered important in life; young person's attitudes to their local area; perception of being treated like an adult

The choice of questions in the instrumentation crosses different spheres of influence as set out in the bio-ecological model but, given both the nature of the design and presumed greater influence of the inner circles, much of the information refers to the individual and his/her microsystem. A noteworthy aspect of the ***Growing Up in Ireland*** design is the continuation of the parent interviews into the cohort members' early adulthood. This means that important contextual data on the parent's own health status, economic situation and so forth are collected first-hand, rather than relying on the second-hand report of the young person (or even having to forego collecting this information altogether).

Health is a good example of a domain where outcomes are shaped by a range of spheres reflected in the ***Growing Up in Ireland*** instrumentation at this wave. At the individual level, health status is influenced by long-standing conditions and in turn this can affect the young person's choices in the post-school period. The individual's health can also be influenced by their parents (in the microsystem): such as through genetic inheritance of a condition or having to forego opportunities to look after a sick parent. Sexual health at 17/18 years may be related to social norms in the young person's peer group or wider community about when it is appropriate to become sexually active and the use of condoms; and – to some extent – government legislation in relation to the legal age of consent for sex. In ***Growing Up in Ireland***, parents of girls are asked whether they chose to avail of the HPV (cervical cancer) vaccine when their daughters were younger; an example of the interaction (mesosystem) between the microsystem (parents) and the macrosystem (in the form of a government policy).

1.4 THE *GROWING UP IN IRELAND* CHILD COHORT COMES OF AGE

The members of the ***Growing Up in Ireland*** Child Cohort were born in 1997/98 and so the interviews in 2015/2016 cover the period where the individuals were about to, or had just, become legal adults at 18 years of age. This milestone reflects not just a new stage in the life-course in terms of the developmental maturity of the individual but also an age that is important in the societal context, with a range of civil rights and responsibilities conferred around this time. These include the right to apply for a driver's licence, have sex, leave school, work full-time, vote and enter into a legally binding contract[1] (including marriage).

Typically, young Irish adults will be making the transition from school to third-level education, training or the labour market around this age. A very high proportion of second-level students stay on to sit the final State exams – the Leaving Certificate – although students can leave from the age of 16 provided they have completed at least three years of secondary schooling. The results of the Leaving Certificate exam are a major determinant of an individual's future educational opportunities and so the final year in school is typically a busy and stressful time.

[1] Note these come into effect at various ages between 16 and 18 years.

The conclusion of secondary education and the departure to college, work or training has traditionally been the period when young adults would also leave the parental home; however, in recent years the increasing cost – and decreasing supply – of rental accommodation may have had a particular role in delaying this transition. For example, the average monthly rent for a one-bedroom apartment in Dublin 6W (an area traditionally popular with young renters) was almost €900 in 2014 (CSO Statbank, 2014) when the student maintenance grant for the entire year was just €3,025 (Citizens' Information Board, 2014). Average monthly rent for a one-bedroom apartment in other main Irish employment and education hubs was €660 in Cork city and €640 in Galway city. However, this issue is not limited solely to Ireland; Eurostat has observed an increase in the age at which young people in the EU leave home (over the period 2000-2013), particularly for men, such that the average EU age for leaving home in 2013 was 25 years for women and 27 for men. Ireland had slightly younger ages than the EU average with men just over, and women just under, 25 years (Eurostat, 2015). The Office for National Statistics (2009) outlines other likely contributing factors to the delay in leaving home such as greater numbers continuing in education for longer, higher university costs, and young people wanting the comforts of home. However, 44% of young people listed lack of affordable housing as the main reason for staying at home, while a further 38% cited general financial pressure.

1.4.1 NATIONAL AND INTERNATIONAL CONTEXT

While every generation faces its own opportunities and challenges, the childhood and youth of the ***Growing Up in Ireland*** Child Cohort has been sociologically 'interesting' in that, as illustrated in the timeline in Figure 1, these young people have been growing up in a time of almost unprecedented national and international change.

In the late 90s when they were born, things were looking optimistic: the Celtic Tiger was increasing economic prosperity, and the signing of the Good Friday agreement paved the way for the end of the Troubles in the North. However, post-Millennium there was a rise in international terrorism related to Islamic fundamentalists, including the 9/11 attacks, and later the Irish economy started to slow before crashing as part of the global recession that started in late 2008. Additionally, the impact of climate change, albeit not universally acknowledged, emerged as a significant threat to global well-being with concerns for both the short and long-term repercussions. There have been positive highlights too with advances in science and technology, the legalisation of same-sex marriage (an international first for Ireland) and the start of an economic recovery - but as the children of the Child Cohort come of age, the world faces significant challenges as well as opportunities.

Figure 1 Child Cohort timeline – National and International context.

GUI Child Cohort		National and World Events
Child Cohort Members are born	1997	
	1998	Good Friday Agreement brings peace to Northern Ireland
	1999	Ireland's unemployment rate drops to 5% in the Celtic Tiger
	2000	The 'dot-com bubble' bursts
	2001	9/11 terrorist attacks in USA
Cohort members starting primary school	2002	The euro becomes legal tender
	2003	Google opens offices in Dublin Docklands
	2004	Ban on smoking in all Irish pubs and other workplaces
	2005	
	2006	Twitter reaches 100 million monthly active users
**GUI - age 9 year visit	2007	
	2008	Lehman Brothers bank collapses
	2009	Barack Obama becomes the first African-American US president
First of the Cohort members start secondary school	2010	HPV vaccination scheme introduced in Irish schools
**GUI - age 13 year visit	2011	Ireland's unemployment rate approaches 15%
	2012	Katie Taylor wins Olympic boxing gold for Ireland
	2013	"Selfie" becomes Oxford Dictionary's *Word of the Year*
	2014	
**GUI - age 17/18 year visit	2015	Ireland approves same-sex marriage by referendum
	2016	Centenary of 1916 rising

1.5 BEING 17/18 YEARS

1.5.1 HEALTH

By age 17/18 years, most girls will have reached physical maturity in terms of growth and pubertal development (particularly for height) while boys may be still maturing (see, for example, CDC growth charts, 2000[2]). Individuals will probably appear much less childish and more adult-like in contrast to

[2] https://www.cdc.gov/growthcharts/data/set1clinical/cj41c021.pdf(boys); https://www.cdc.gov/growthcharts/data/set1clinical/cj41c022.pdf

the previous ***Growing Up in Ireland*** visit at age 13 years. This is a time when young people may be particularly concerned by aspects of their appearance such as body size and shape, and girls especially may be at an increased risk of an eating disorder (Centres for Disease Control and Prevention [CDC], 2017). Health-related routines established at this age, such as engagement in physical activity and sport, may 'track' into later adulthood (e.g. Makinen et al., 2010).

According to the CDC[3], the main health risks for older teenagers are those related to risky driving, alcohol and other substance use, injuries from sports and other physical activities, risky sexual activities and suicide. Eating healthily, exercise and getting sufficient sleep are important supports for continued health development (CDC, ibid).

1.5.2 SOCIO-EMOTIONAL DEVELOPMENT

Young people aged 17/18 years are usually closely engaged with peers but may now feel more confident to assert their individual identities. They will usually expect to be treated as adults but parents will likely continue to be an important source of guidance and support (Stewart, 2013). Involvement in voluntary or paid work can increase opportunities for interactions with a wider circle of other people as an adult with responsibilities. Romantic or intimate relationships with a particular individual become more usual and may involve a longer commitment (e.g. Collins, 2003). The legal age of consent for sexual intercourse in Ireland is 17 years.

This can also be a stressful period of the life-course due to important exams, fluctuating relationships and concerns about appearance exerting pressure on mental health. It is a period when young adults are at risk of experiencing depression, eating disorders, self-harm and excessive drinking (see chapters 4 and 5 of this review). Some researchers (e.g. Pokhrel et al., 2013) point to a mismatch in self-regulation capacity in late adolescence, which neurologically is en route to maturity but still the period is associated with an increase in risky behaviours. Hoffman, Friese and Strack (2009) describe a dual-system perspective to account for situations in which "people are torn between their long-term goals to restrain their behaviour and their immediate impulses that promise hedonic fulfilment" (p.162).

However, with new experiences come new opportunities as well as new challenges. In many ways the period between late adolescence and early adulthood is a phase in the life-course when a focus on self-development and discovery is considered acceptable and sometimes actively encouraged (e.g. Arnett, 2014). For example, at least for those who can afford it, there is the possibility of a 'gap year' after secondary school with the possibility of travel to exotic locations, meeting new people and exploring new experiences.

[3] In 'information directed at parents of older adolescents'.

1.5.3 EDUCATION AND COGNITIVE DEVELOPMENT

By age 17/18 years, young people in Ireland are approaching the end of secondary schooling. Some may already have left to pursue third-level education, vocational training or other avenues; but for the majority still in school they will be facing pivotal final exams - the 'Leaving Certificate'. Students typically take seven subjects in these State exams and the grades in their best six subjects give them a 'points' total, which in turn is the main criterion for allocating places in higher education. As performance in many subjects is judged on a student's performance in a single exam on a particular date during the exam period in June, it can be a very stressful time. In Ireland, a very high rate of students (over 90%) who enter secondary education stay on to do the Leaving Cert examination (Department of Education and Skills, 2015b) so most people in the ***Growing Up in Ireland*** Child Cohort will go through this experience.

In terms of neurological development, the brain as an organ is approaching the optimal stage in the lifecycle - although a person's academic capacity, knowledge and skills can continue to grow through education and life experience (Teipel, n.d.). Critical thinking and study skills may be further honed through third-level education.

1.5.4 ECONOMIC AND CIVIC PARTICIPATION

Although few 17/18-year-olds in Ireland are in full-time employment at this stage, (fewer than 17% of 15-19 year-olds were in the labour market in 2017 according to CSO figures)[4], legally they can have entered the labour market even if they have not secured a regular job. Perhaps more common would be young people combining part-time work with school or study. Those who come from farming backgrounds or from households with small family businesses may have been contributing to the running of these enterprises for some years.

Another important aspect of civic participation relevant to 17/18-year-olds is volunteering. Now that they are mature enough, chronologically and emotionally, young adults may take an active role with a charitable or sporting organisation. Late adolescence is also a time when individuals may engage more with social and political causes and start to consider their role in wider society.

At age 17 years, a person can apply for a driver's licence for a car. Access to private transport is an important milestone in rural areas particularly, meaning that young adults can be more independent and potentially have greater access to work, study and social activities.

1.6 ABOUT THIS REVIEW

This review of literature in relation to the ***Growing Up in Ireland*** Child Cohort at 17/18 years builds on previous reviews undertaken in relation to the cohort at 9 and 13 years old (Greene et al., 2010; Morgan, Thornton & McCrory, 2016). The review approach is narrative rather than systematic with

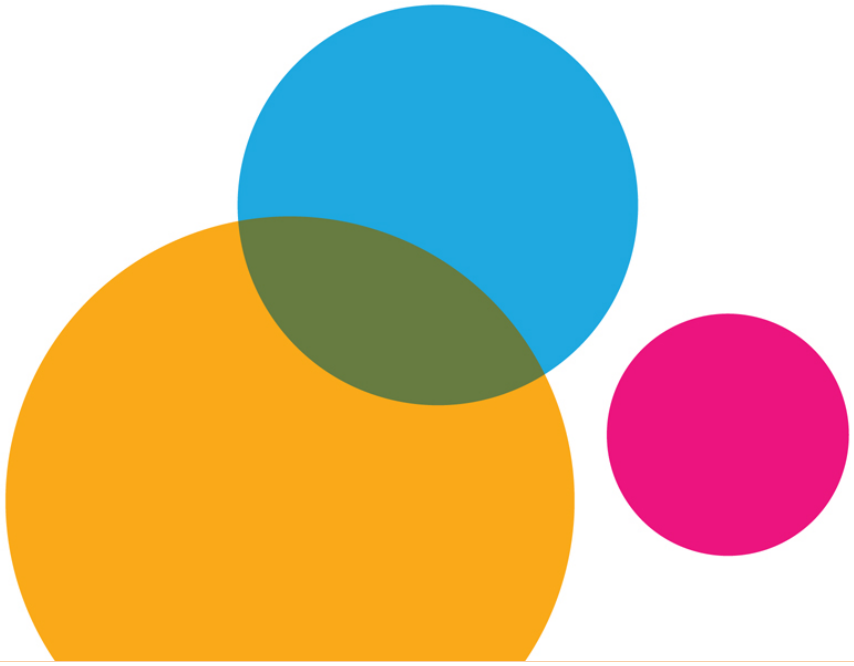
[4] Source: CSO Statbank Table QNQ23.

priority in selecting works given to age-appropriateness of participants; relevant Irish data; longitudinal/cohort study data; large sample sizes; in addition to relevance of the work to the topic under discussion. It covers the four domains illustrated in Table 1 above and focuses in detail on three issues within each domain. Given the broad range of topics covered in the literature reviews for the previous phases of the Child Cohort at 9 and 13 years, the Study Team has decided to include a narrower range of topics for this age group but with considerably greater coverage of each. It is hoped that this approach will facilitate further research on these topics using the available data from the survey. In selecting topics, the authors have highlighted those that are particularly relevant to the cohort at this stage in the life-course and/or represent new areas of data collection for the study. Therefore, the remainder of this publication is structured as follows:

- Chapter 2 –Entering Adulthood: Economic and Civic Participation
    - A new domain for ***Growing Up in Ireland***, it considers the literature on emerging adulthood, volunteering and youth employment.
- Chapter 3 – Education
    - Given the dominance of the transition from school for 17/18-year-olds this chapter focuses on reasons for early school-leaving, factors affecting performance in exams such as the Leaving Certificate, and influences on post-school choices.
- Chapter 4 – Socio-emotional Development
    - This chapter starts with a consideration of mental health issues for young adults then moves on to an overview of the influence of peer relationships at this stage. The final section looks at the development of romantic relationships from a socio-emotional perspective.
- Chapter 5 – Health
    - Continuing on the theme of relationships, the health chapter begins with a consideration of sexual health and behaviour. Next, the issue of cardiovascular health is considered, especially in light of the new blood pressure measurement that was collected for the first time at this wave. Finally, it looks at the issue of alcohol use - and abuse – one of the leading causes of premature death and injury (Burton et al., 2016).
- Chapter 6 – Concluding remarks.

Chapter 2

EMERGING ADULTHOOD AND ECONOMIC AND CIVIC PARTICIPATION



2 EMERGING ADULTHOOD AND ECONOMIC AND CIVIC PARTICIPATION

This domain is a new area of data collection for the ***Growing Up in Ireland*** Child Cohort at age 17/18 years. It reflects the new experiences and contexts that the young person encounters as he/she leaves school and enters environments shared with adults as a peer rather than a child or teenager.

The first section in this chapter discusses 'emerging adulthood' as a stage in the life-course and also as the next generation of adults in Irish society. The second section looks at the issue of volunteering as an example of civic participation with the young person 'giving back' to society as an increasingly mature individual – and how they might expect to benefit in return. The third and final section considers the world of work for young adults, focusing on those who choose to enter the labour market rather than continue in education as well as those who work part-time while studying.

2.1 ADOLESCENT, ADULT OR 'EMERGING'?

2.1.1 LEGAL AND SOCIO-ECONOMIC STATUS

At age 17/18 years, Irish youth are on the cusp of adulthood and, in many ways, are already in a position to (legally) undertake many of the responsibilities associated with adult life. They can live on their own, have sex (from which children may follow), get married (at 18), drive a car, leave education, get a job; even apply to own a firearm. However, the available statistics (detailed below) suggest that for the most part Irish 17/18-year-olds are still in education (mostly second level), unmarried, and living with their parent(s). Once young people turn 18 years, they can legally undertake most adult responsibilities.

According to Census 2016 (CSO Ireland), 93% of 17-year-olds and 85% of 18-year-olds lived at home with their parents which were very similar to the percentages recorded in Census 2011. Census 2016 also showed that while the marital status of the vast majority of people aged 15-19 years was 'single', there were small numbers who were, or had been, married. According to the most recent vital statistics published by the CSO (CSO, 2017), the number of births to mothers under 20 years halved between 2005 and 2015 (down from 2,406 to 1,119) so most 17/18-year-olds have not become parents yet.

In terms of principal economic status, the results of Census 2016 indicated that 94% of 17-year-olds and 82% of 18-year-olds were classified as a 'student or pupil'; just 2% of 17-year-olds and 9% of 18-year-olds were at work (CSO, 2017). Gradual increases over time in the typical starting age for children in primary school (to age 5), coupled with the addition of a 'transition' year between junior and senior cycles in secondary schools, have contributed to a later age of finishing second-level education for more recent cohorts.

2.1.2 LATE ADOLESCENCE/EMERGING ADULTHOOD AS A STAGE OF THE LIFE-COURSE

The phenomenon of young adults living for more prolonged periods in the family home with their parents has been the subject of both sociological and psychological research in recent years (e.g. Arnett, 2007; Bynner, 2005; Furstenberg Jr, 2010; Sawyer et al., 2018). Certainly in Ireland there were quite large

numbers of adult children (i.e. 18 years or over) living with their parents at the time of Census 2011 (440,000 people from a total population of circa 4.5m), and, while many were students, (137, 967) the majority were in the labour market. This figure had increased by over four per cent by the time of Census 2016 (CSO, 2017), particularly among those who were at work but still living at home (19% increase compared with 2011 figures). There has been much discussion around whether the period between late adolescence and early adulthood should be regarded as a distinct stage in the life course or just a transition phase from one stage to the next. The term 'emerging adulthood' has been adopted by Jeffrey Arnett (e.g. Arnett 2000, 2007) to describe the period between the late teens and late-20s.

Arnett's framework proposes that this period (late teens to late-20s) in industrialised societies has distinct developmental characteristics. It is a time of frequent change and exploration in romantic life, occupations, demographics and worldviews, and is frequently seen as the most volatile period of life.

Arnett (2014) outlines five main features of the emerging adulthood period as:

- Identity explorations: in a 2000 survey of Americans aged 18-29 (by Arnett), a majority agreed that this was a time for self-discovery
- Instability: a busy period with changes in relationships, education and work situations
- Self-focus: a time relatively free of obligations to others when it is acceptable to focus on one's self
- Feeling "in-between": a sense of being on the way to adulthood but not quite there yet; a process rather than a quick change from adolescent to adult
- Possibilities/optimism: despite this being a stressful period, a belief that they will get what they want in life eventually.

According to Arnett (2014), a key criterion for reaching adulthood among individuals in the emerging phase is "accepting responsibility for your actions" (p.156). A period of experimentation with different aspects of adult life may come to be rounded off with an acknowledgment that actions have consequences which must be borne by the individual. Indeed, despite a degree of fluidity in this period of the life-course, many choices taken at this stage lay the foundation for later adult life in terms of further education, occupational paths and relationship decisions.

In contrast to Arnett's emphasis on beliefs, other researchers have focused on what life events or transitions signify to the self that adulthood has been reached. In a large longitudinal sample of largely disadvantaged American youth, Benson and Furstenburg Jr. (2006) found that individuals were more likely to increase their sense of identifying as an adult over the period 19 - 21 years if they had moved out to set up their own household or had a child (the latter for women only). Conversely, those who had experienced a role reversal such as moving back in with parents were less likely to describe themselves

as being fully an adult at age 21. An increase in financial, but not household, responsibilities was also associated with an increase in the likelihood of feeling fully an adult. Entering the labour market was only associated with an increase in adult identity when it was accompanied by moving to an independent household. Benson and Furstenburg Jr (2006) also note, in their review of other literature on this topic, that which precise events mark the transition to adulthood seems to vary for different demographic groups (i.e. by social class, race, and gender) so the themes underlying emerging adulthood may be less universal than some commentators, such as Arnett, suggest.

Perspectives that focus on emerging adulthood as a period of identity development have grown from Erikson's theory of life-course development where the end-goal of adolescence is to resolve one's identity crisis. As Schwartz et al. (2012) summarise it, individuals with a well-developed sense of who they are can expect healthy psychological adjustment and a good foundation for later adult development whereas people who are in confusion over their identity will experience distress and difficulty with making important life decisions. Schwartz et al. further describe how different researchers over the years (such as Marcia; Luyckx et al; Cote et al.,) have grappled with describing processes in identity development and its relationship to personal development; however, the central themes tend to revolve around the importance of exploration of identity, commitment and satisfaction (or not) with that commitment (2012).

In keeping with the experimentation/exploration 'mood', the late-adolescent/early adulthood period has traditionally been associated with a peak in risk-taking behaviour (Arnett, 2000), particularly those relating to risky sexual behaviours, substance use, and other anti-social behaviours but which are generally expected to decline as the person matures. Moffitt (summarised by Elder & Shanahan, 2007) found evidence of two patterns of anti-social behaviour over the life-course: a group that engage in such behaviour over the life-course and another whose anti-social activities are largely limited to adolescence. This peak in risky activities may relate to the fact that young people may be freer than older or younger age groups to pursue novel and intense experiences – having less parental monitoring and supervision on one hand and being less constrained by responsibilities on the other. It may also be explained by an increased desire for sensation-seeking, particularly in the presence of peers.

To some degree, these risky behaviours could be viewed as part of a process of identity exploration; however, the negative consequences of risk-taking have the potential to persist throughout the life course - for example in the case of criminal convictions, sexually-transmitted diseases, road traffic accidents or poor educational attainment. Not all risk-taking is inherently negative, however; young adults may also use this time to explore new sports, creative outlets or to travel. For example, according to an analysis of the Longitudinal Study of Young People in England, just under 7% of the cohort described themselves as 'on a gap year' when surveyed at age 18/19 years (in 2009) (Crawford & Cribb, 2012). Albert Bandura (2006) particularly emphasised the agency aspect of development over the life course: i.e. that individuals shape their environment as well as being shaped by it. He noted that humans have the capacity to form intentions, plan goals, predict the likely consequences of a particular choice, self-

regulate to achieve goals and reflect on the 'soundness' of their intentions (Bandura, 2006). A combination of increased maturity and independence in the emerging adulthood phase could push the role of agency to the forefront of factors shaping development around this time.

Some commentators refer to young people's uncertainty of their life course 'status' at this stage. Bynner (2005) describes it as "more on the threshold of making long-term decisions and commitments" (p.368). Life-course theory (Elder & Shanahan, 2007) views the transition from adolescence to adulthood as less of a distinct phase and more part of a much wider context individually, socially and historically - which will influence how the transition will unfold and how it will be perceived. A person's experience of 'emerging adulthood' as a transition or even turning point in their life trajectory will be influenced by what has preceded it (e.g. in terms of skill development and personality forging); the lives of others to whom the individual is linked (e.g. a parental illness may require the young adult to remain at home and help out); the opportunities and constraints available at a given time or location (e.g. access to Higher Education); and the individual's own choices. Most recently, an opinion piece in the Lancet argues for the 'adolescent period' to be extended up to age 24 (and starting at 10 years). The authors, Sawyer, Azzopardi, Wickremarathne and Patton (2018), posit that "Earlier puberty has accelerated the onset of adolescence in nearly all populations, while understanding of continued growth has lifted its endpoint age well into the 20s. In parallel, delayed timing of role transitions, including completion of education, marriage, and parenthood, continue to shift popular perceptions of when adulthood begins." (p. 223).

2.1.3 GENERATION EFFECTS

Each cohort experiences a unique social and historical context with a set of opportunities and barriers that may be quite different to those faced by their parents. For example, employment in the period after World War II up to the mid-70s was characterised by improvements in pay and conditions, and relatively high stability and security for many workers with permanent jobs, pension schemes, and an emphasis on social protection (Kalleberg, 2017). More recently, however, market forces have come to dominate again resulting in greater inequality in many countries, and an increase in precarious working arrangements especially for younger workers.

Bynner (2005) compared three different British cohorts (born 1946, 1958 and 1970) at the post-'emerging adulthood' age of 30 on a range of indicators. He found a marked increase in the percentage of people attaining an upper-second level qualification over time, particularly for women: only 19% of the women in the 1946 cohort had this level of education by age 30 rising to 29% in the 1958 cohort and 46% for those born in 1970 (comparable figures for men were 34%, 53% and 54%; p.373). In contrast, women of the later cohort were much less likely to have had a baby by thirty, with only around half of the 1970 cohort having their first baby by the age of 30 compared to over 90% of the women born in 1946 (p.373). Bynner (ibid) also notes a decrease in political interest and increases in political cynicism and law-breaking among the younger cohorts (although it is worth noting that the youngest cohort in Bynner's review were still born nearly 20 years before the GUI Child Cohort).

Furstenburg Jr. (2010) makes similar cohort comparisons in the United States. Using US Census data, he notes that statistics from 1950 indicate around 15% of 18-24-year-olds were still in education, which had risen to 30% by 1980 and 45% by 2007 (p.69). There was a decrease in the proportion of 18-24-year-olds who were married, dropping from over 40% in 1950 to about 15% in 2007 (p.71). Furstenburg Jr. also identifies a decrease in the proportion of ever-married young women in the 15-19 year age group who have at least one child – from over 55% in 1950 to around 45% by 2006 - although this decline was markedly less linear than that of other measures (p.72).

Both Bynner (2005) and Furstenburg (2010) comment that one of the biggest sociological changes over time has been the reduction in employment opportunities for individuals with lower education levels; thus increasingly some kind of third-level qualification is needed to secure stable and well-paid employment. To some extent this highlights structural inequalities between youth who can 'enjoy' a protracted adolescence through a financially-supported studentship that equips them to find better employment and those who enter the labour market because they cannot afford to continue to third-level education but are unable to achieve financial and residential independence because they cannot get suitable employment. Furstenburg Jr remarks that in the USA:

> Youth from all economic strata are remaining in school longer and marrying later, but young adults from less-advantaged households are finding it increasingly difficult to adhere to an orderly and predictable sequence of education, full-time employment, home-leaving, cohabitation or marriage, and parenthood. In more privileged families, youth more often adhere to the traditional sequence but take far longer to complete the demographic milestones of successful passage to adulthood and remain financially dependent on their parents while they complete their education. (p.72).

While alternative timing or sequencing of events for individuals or groups is not a negative thing per se, where this is driven by inequalities in opportunity rather than personal choice it should be a cause for concern. As Elder and Shanahan (2006) note in the context of "linked lives", both the individual and society are conscious of 'mis-timings' in life-course development especially where transitions affect multiple people. Elder and Shanahan give the example of a mis-timed pregnancy in late adolescence/early adulthood which changes the context, trajectory and role of not just the new mother but also their own parents (now grandparents) and even grandparents (now great-grandparents).

Other sociological changes that have altered the profile of this period of the life-course in terms of family formation are the availability of contraception that allows people to exercise much greater reproductive control and as a result allows greater female labour market participation. Both contribute to later ages for marriage and having children, which is not to imply that one necessarily precedes the other. Both Bynner (2005) in the UK and Furstenburg Jr (2010) in the US note that while there has been a general trend for delayed parenthood, a greater proportion of births to young women are among those with disadvantaged socio-economic circumstances.

2.1.4 CHANGING RELATIONSHIPS WITH PARENTS

Very early family formation seems to be comparatively rare in Ireland with most people aged under 19 still living with their own parents (CSO Ireland, 2016) and the fourth-oldest mean age of mothers at birth (32.5 years) among OECD countries (Organisation for Economic Co-operation and Development [OECD], 2017). The average age for Irish first-time mothers in 2015 was 30.6 years which is an increase on previous years (CSO, 2017). In this context, relationships with parents are likely to remain highly significant in the lives of young Irish people at this stage, but also undergo change as these relationships are recalibrated in the light of the young person's increasing independence and developing identity as an adult. Longitudinal analyses have reported a decline in parental support from early to middle adolescence and a stabilisation thereafter (Shanahan, McHale, Crouter & Osgood, 2007), coinciding with an increase in parent-child conflict during the adolescent period (McGue, Elkins, Walden & Iacono, 2005; DeGoede Branje & Meeus, 2009); this conflict is expected to decline with the maturation of the young adult as their capacity to understand their parents' perspectives and re-negotiate their respective roles increases (Teipel, n.d.).

Despite a popular expectation of growing independence from parents during late adolescence, several studies have identified parental monitoring as a protective factor. High levels of parental monitoring have been related to lower levels of antisocial behaviours and substance use (Criss et al., 2015). Pesola et al. (2015) found that among the Avon Longitudinal Study of Parents and Children (ALSPAC) cohort, engagement in harmful alcohol use was lower among 18- and 19-year-olds who reported high levels of active parental monitoring and control. Parental monitoring also protected against the influence of deviant peers (ibid). In terms of psychological outcomes, Hamza & Willoughby (2011) identified that in a sample of adolescents aged 14-17, higher parental knowledge, including child disclosure and parental control, was associated with lower adolescent depressive symptoms over time.

There are several possible explanations for the apparent positive influence of parental monitoring, from limiting adolescents' ability to engage in certain risky behaviours to the potential for 'internalisation' of the parent's views on risky behaviours. Parental monitoring increases parent's knowledge of their child's activities, which situates parents in a better position to guide them towards appropriate activities and deter them from anti-social contexts (Criss et al., 2015). Additionally, spontaneous disclosure of information by the young person reflects an open dialogue in the parent-child relationship, facilitating a warm, trustful relationship which can have a positive influence on the adolescent. Both adult and child reports of the parent-child relationship have tended to be very positive overall among participants in ***Growing Up in Ireland***, at age nine years (Williams et al., 2010) and again at age 13 (GUI Study Team, 2012). Additionally, at age 13 years, three-quarters of teenagers in ***Growing Up in Ireland*** reported that their parents 'expected them to follow family rules' and just a small minority felt their parents 'let them get away with things' (10% in respect of mothers and 15% in respect of fathers) (ibid).

2.1.5 *GROWING UP IN IRELAND* AT 17/18 YEARS

The 17/18 year phase of ***Growing Up in Ireland*** captured a lot of new information relating to this exciting phase of the participants' life course as they transition from adolescence to adulthood – a stage which will be relatively short for some and take many years for others. The survey collected details on the young people's current status in relation to education, work and family as well their future intentions. Additionally, and for the first time, young people completed several attitudinal measures on largely adult concepts such as confidence in State institutions, gender equality, attitudes to work and what aspects of life they consider important. Outcomes and attitudes at this stage in the life-course can be examined in light of earlier experiences and contexts such as how the then-13-year-old coped with the transition to secondary school, parental occupations and the presence of older siblings who preceded them in negotiating the progression to adulthood.

In terms of the changing micro-system, ***Growing Up in Ireland*** has detailed information on the evolving parent-child relationship from the perspective of the young people and their parents. Parents were asked about their level of involvement in the young person's life and their discussion (if any) with him/her of plans for the future as well as sexual health issues. They were asked about their knowledge of the young person's smoking, alcohol and cannabis use. There were standardised measures about parental monitoring and disclosure that were completed by both parents and young people. The young people's questionnaire obtained information on their perception of their relationship with their mothers and fathers where relevant, and, longitudinally, parents reported on closeness and conflict in the child-parent relationship at earlier ages.

These and other data from the survey can paint a picture of how 'adult' the 17/18-year-olds of 2015-2016 really are, what aspects of their earlier lives influenced their current stage of development and what their plans are for the future.

2.2 VOLUNTEERING

2.2.1 RATES

Late adolescence and early adulthood can be a period of heightened engagement in voluntary activities. In a Department of Communities and Local Government citizenship survey in England 2009/2010 (cited by Department of Education Youth Research Team, 2011), 50% of young people aged 16-19 years participated in formal volunteering and 60% in informal volunteering, which was higher than the rates of 40% and 54% respectively for the total adult group aged 16 and over. In America, the Youth Volunteering Survey reported a volunteering rate of 55% among young people aged 12-18 years which contrasted with a rate of 29% among an adult sample who participated in a comparable survey (Grimm, Dietz, Spring, Arey & Forester-bey, 2005). During adolescence, volunteering opportunities may be largely organised and encouraged through schools or other organisations and could differ from the more self-directed nature of volunteering in adulthood. The US Bureau of Labour Statistics (2016) estimated the

volunteering rate among young people aged 16-19 years at 26.4% (for the year ending in Sept. 2015); while for 20-24-year-olds it was just 18.4% (the lowest by age group).

According to the Irish Census 2006, however, just over 13% of young people aged 15-19 years participated in at least one voluntary activity in the previous four weeks. Participation in voluntary activities for the whole adult population aged 15 years and over was 16% (CSO, 2007). In contrast, a multi-national ICCS[5] study on the civic engagement of lower-secondary school students (circa age 13-14 years) found that in Ireland 67% had been involved in some civic activity outside school; 50% with 'a voluntary group that did something to help the community', which compares favourably to the ICCS average of 34% (Cosgrove, Gilleece & Shiel, 2011). There may be confusion over what counts as 'volunteering' and substantial differences in the extent of involvement from one-off events to a regular commitment over a period of time. Qualitative interviews on the subject of youth volunteering on behalf of the National Youth Council of Ireland (2011) discovered that young people often had a very narrow definition of the term, focusing on fundraising and charitable activities, and did not consider helping out with sporting or cultural activities as "volunteering".

2.2.2 CHARACTERISTICS OF VOLUNTEERS

The previously mentioned American survey of youth volunteering found that higher academic achievement, regular religious attendance and having a parent who volunteered were associated with a greater likelihood of youth participation (Corporation for National and Community Service, 2005). These characteristics are likely related to the finding that religious organisations and schools were important routes into voluntary activity for young people. Furthermore, the authors speculate that students with better grades may have wider social networks, be offered more volunteering opportunities and/or feel more empowered to seek out or take up roles with some responsibility. In the UK, the DfE Youth Research Team (2011) reported that voluntary activity tended to be higher among young people from professional/managerial and Black or Asian backgrounds, and among students compared to those in employment. Statistics for the adult population in the Irish Census 2006 also indicate a higher volunteering rate among more socio-economically advantaged groups with participation rates of around 24% in the professional/managerial classes down to 13% for the semi-skilled group and under 10% for the unskilled.

Work by Wray-Lake, Keyes, Schulenberg and Shubert (2017) endeavoured to examine the effect of historical time on SES patterns in community service and voluntary work using multiple cohorts of a large American panel study of youth between 1976 and 2011. Overall, they found a high level of consistency between cohorts with higher rates of volunteering at age 18 years consistently associated with women, better educated parents, higher religiosity, better academic grades and having no plan for college. Rates

[5] International Civic and Citizenship Education Study.

of volunteering tended to decline sharply during the transition to adulthood before levelling off in the mid-20s, and this was also consistent across historical time. Some groups showed a sharper decline than others: for example, while better grades were associated with more community service at age 18 years, this group's participation declined so rapidly as to be lower than those with lower levels of achievement by age 26 years.

In terms of differences in other characteristics, a Turkish study compared youth volunteers to non-volunteers of similar background. Cemalcilar (2009) found volunteers were more likely to be younger, female and with higher scores on measures such as self-concept, self-esteem, social responsibility and community belonging.

Volunteering is important as it is a dynamic associated with the development of positive social and psychological pathways (O'Connor et al., 2016). O'Connor and colleagues argue that such skills enabling positive social and psychological development can be taught and learned, and propose the education system as a platform to promote positive development. The benefits of volunteering in terms of aspects such as self-development are discussed further below.

2.2.3 WHY YOUNG PEOPLE VOLUNTEER

From qualitative research with around 90 young Irish people, the National Youth Council of Ireland (2011) identified the most important reasons that prompted engagement in voluntary activity as:

- Identification with the value of the cause/activity
- Because someone asked them to take part
- Existing connections with the cause/group such as through family or friends
- A desire to make a difference or help others
- Being able to see a link between their involvement and actual results.

Other factors that were frequently mentioned by this group, but were not thought to be as influential, included opportunities to socialise with others, to develop new skills and a desire to take on a new challenge or responsibility.

These sentiments are echoed in the findings of an online survey of 200 volunteers aged 16-35 years conducted on behalf of Volunteer Ireland in 2012. Bourke (2013) reported that the most popular motivations for volunteering were 'wanting to make a difference' (29.5%), 'wanting to help people' (22%) and 'wasn't working so had free time to give' (22%). Secondary influences included opportunities to 'add experience to my CV' (24.5%), to 'meet people/make new friends' (20.5%) and to 'learn new skills' (17.5%).

In contrast, in focus groups conducted for the National Children's Advisory Council (2006) with 55 children and young people aged 10-18 years, the social aspect emerged as a key driver of participation – "All the research participants agreed that they volunteered either because their friends were doing it, or because they wanted to make friends and meet other people" (p.54). Other frequently mentioned motivations included volunteering as something to do if you're bored and an opportunity to do something interesting or exciting.

It may be that motivations (and perceived motivations) for volunteering differ between younger adolescents and older adolescents/young adults; and also, between active volunteers and non-volunteers. A multi-national survey of over 4,000 undergraduate students (Smith et al., 2010) found that the altruistic reason 'it is important to help others' was the most frequent motivation, which was endorsed by just over 90% of regular volunteers but slightly fewer than 80% of non-volunteers. In contrast, non-volunteers were more likely than regular volunteers to list the more self-centred reason of 'something to put on my CV when applying for a job'.

Existing networks through family, schools or churches may be important 'portals' to becoming a volunteer in terms of both instilling a sense of civic responsibility and practically organising volunteering opportunities. A small, largely qualitative, Australian study of adolescent volunteers highlighted the importance of not just networks but also mentoring while engaged in community activities for younger volunteers (Webber, 2011). Other themes identified in that particular study were "an ability to assess complex social and moral issues" (p.12-13), the young adult possessing sufficient confidence and skills to be able to operate 'out of their comfort zone' (in terms of direct interaction with vulnerable groups), and the importance of ongoing training and debriefing to maintain their involvement.

2.2.4 DO YOUNG PEOPLE BENEFIT FROM VOLUNTEERING?

Studies that ask young people about the benefits of volunteering tend to identify the development of personal or 'soft' skills such as leadership and communication, and less frequently mention more concrete skills. In the large-scale survey of volunteering among undergraduate students by Smith et al. (2010), respondents were asked to describe the benefits of volunteering (in addition to helping others). The benefits endorsed by at least half of the regular volunteers were:

- Opportunity to learn new things (85.9%)
- Leadership skills (83.8%)
- Self-satisfaction (83.2%)
- Job/career experience (79.2%)
- Social contacts (75.1%)
- Provides references for employment or college (72.1%)

- Builds trust among people in society (71.2%)
- Professional networking (64.2%).

Similarly, a longitudinal qualitative study of young people from the UK and Australia who spent a gap year volunteering abroad in a low-income country identified skill development in relation to communication, organization, interpersonal skills and - more specific to this type of voluntary activity - the experience of learning to live independently and see the world from another perspective (Jones, 2005). Among people aged 16-35 years who responded to the Volunteer Ireland survey (Bourke 2013), the most popular responses as to 'what practical benefit or outcome' had been derived from the voluntary work were 'I developed new personal skills' (21.5%) and 'I became more confident' (18%).

The (circa 22,000) respondents to the Canadian Youth in Transition Survey (of whom 45% had volunteered) were asked more specifically about the application of their voluntary experience to the labour market. One-third agreed it had helped them get a job and nearly 60% agreed that volunteering had provided new skills they could apply to a job or business (Bowlby & McMullen, 2002), although there were marked regional variations. The obverse of these particular statistics, of course, is that a majority did not feel the voluntary activity had helped them get a job and a sizeable minority did not think they had really acquired any job-related skills; however, these potential benefits may relate to the nature and extent of the particular type of volunteer work they were engaged in.

An initial exploration of the benefits of volunteering conducted by the UK's National Young Volunteers Service, using longitudinal data collected as part of the Citizenship Education Longitudinal Study and the British Household Panel Study (Lopes, Kerr & Nelson, 2010), suggested that youth volunteer activity was associated with more positive outcomes in relation to social, political and economic measures – and in particular for achieving a higher education qualification. However, other research shows that engagement in voluntary activities is associated with socio-economic and educational advantage (e.g. Wray-Lake et al., 2017).

Much of the literature on the benefits of volunteering is based on asking participants a direct question. It is possible that people who have invested considerable time and effort in a voluntary activity may be motivated to identify a benefit to themselves when asked, and such benefits are rarely objectively evaluated (but see Babor, Higgins-Biddle, Saunders & Monteiro, 2001)). In a review of the literature on civic engagement among American teenagers, Zaff and Michelsen (2002) concluded young people who were involved in community and political organisations went on to have a superior work ethic, continue with voluntary work and possess "more socially responsible attitudes" (p.2): however, they also acknowledge that individuals with these underlying characteristics might be the ones who are already the more civic-minded adolescents.

There are some more directly measured insights from an examination of longitudinal trends as part of a study on participation in high school activities, identity and the transition to adulthood involving a large

(ca. 900) group of American teenagers (Barber, Eccles & Stone, 2001). They reported that being a participant in 'prosocial activities' including volunteer and community service work in Grade 10 (15-16 years) was associated with decreased alcohol and marijuana consumption, a greater likelihood of college graduation, and higher self-esteem. Participation in prosocial activities was, however, unrelated to other measures of psychological adjustment (such as worry) and educational/occupational achievement (like having a job 'with a future' at age 24 years). In Australia, O'Connor et al. (2014) used data from the Australian Temperament Project to test hypotheses related to the development of a model of positive development and resilience in emerging adulthood. They report that 'eudaimonic behaviours' in adolescence (i.e. engagement in activities that aim to benefit others) were longitudinally associated with higher 'emotional competence' in young adulthood and lower rates of anxious-depressive symptoms.

2.2.5 *GROWING UP IN IRELAND* AT 17/18 YEARS

In the 17/18 year wave of ***Growing Up in Ireland***, young people were asked an open question regarding the nature and extent of their voluntary work. There were additional closed questions regarding involvement with other groups and activities such as youth groups – although not specifically as a volunteer. Age 17/18 years is a particularly interesting time-point in relation to voluntary activity: on one side, there is increased independence, including easier access to transport and the greater capacity to contribute that comes with increased maturity; on the other side, there is significant time pressure from exams and it is a time of transition away from school and possibly from the locality. The information collected as part of ***Growing Up in Ireland*** can facilitate the exploration of young people's contribution to society through volunteering, an analysis of both the earlier and concurrent characteristics associated with becoming a volunteer and, longitudinally, whether such engagement will ultimately be associated with benefits for the young person. In terms of identifying the characteristics of individuals who become volunteers, there are several variables from previous waves to consider, such as academic ability, social development, religious attendance, participation in organised activities, school ethos and parental involvement with voluntary organisations.

2.3 YOUNG PEOPLE AND THE POST-SCHOOL LABOUR MARKET

In Ireland young people who complete secondary-level education are generally aged 17-19 years when they decide between continuing to further or tertiary education or entering the labour market. For the child cohort at 17/18 years, therefore, there is a mix of individuals who are still in higher second-level education, already in third-level/post-secondary education or in the labour market. It is likely that individuals who left school early with either no or only lower second-level qualifications will be over-represented in this third group. In Census 2016, most young people aged 15-19 years (266,809) were classified as 'students or pupils' in contrast to 18,494 at work, 6,083 'unemployed and looking for first regular job' and 8, 216 'unemployed, having given up or lost their previous job'[6]. Statistics from the CSO

[6] Source: CSO Statbank Table EZ002.

(QNHS Q2, 2017) indicate a labour market participation rate of 16.5% among youth aged 15-19 years, compared to a rate of about 60% for all adults aged 15 years and over[7].

For many 17/18-year-olds, their first foray into the labour market will be as part-time workers while still at school or college. Having a part time job during school may affect early school leaving. Research from Vickers and colleagues, using the Longitudinal Survey of Australian youth data, found that working between one- and five-hours during Year 9 of secondary school had no effect on early school leaving; however, working more than five hours significantly increased the likelihood of termination of school attendance prior to school completion, and this effect was stronger for males (Vickers, Lamb, & Hinkley, 2003). In an overview of 50 studies, Neyt et al. (2019) found that part-time work while studying was associated with lower rates of progression to teritary education and, for university students, lower levels of course retention. Nonetheless, some positive effects of part-time work during school are found, including a higher likelihood of securing an apprenticeship and a lower rate of unemployment after school (Vickers, Lamb, & Hinkley, 2003).

2.3.1 YOUTH UNEMPLOYMENT

2.3.1.1 EFFECT OF THE RECESSION

As noted above, the 17/18 years since the birth of the members of the ***Growing Up in Ireland*** Child Cohort have been an economic rollercoaster with an unprecedented boom in the period from the late 90s to mid-00s (the so-called 'Celtic Tiger') and an equally unprecedented crash from around 2008; with the first signs of recovery only emerging in 2013/2014 (e.g. Ruane, 2016) and tending to favour the larger urban centres (e.g. O'Donoghue, Kilgarriff & Ryan, 2017). Young people in the employment market were particularly hard-hit by the economic recession relative to other age groups (McGinnity, Russell, Watson, Kingston & Kelly, 2014), with labour market participation of youth aged 15-19 years falling from 27% in 2007 to 16% in 2012 compared to a rate of circa 80% at both time-points for the 35-44 year age group. McGinnity et al. suggest that many individuals in the 15-19 age range have remained in education to offset the reduction in employment opportunities as evidenced by the fact that the 'NEET' (not in employment, education or training) rate for this group remained relatively stable at 5% over time, whereas it almost doubled for the 20-24 year age group. However, in a review, the Oireachtas Library and Research Service (2013) also points to an increase in emigration for the 15-24 year age group, rising from 17,800 in 2008 to 34,800 in 2013. These authors additionally highlight a disparity between trends in the Irish and European unemployment youth rate; Irish rates increased steeply from a steady 9% in the period 2003-2007 to 30% in 2012 while European unemployment rates were 16% in 2007, rising to 23% in 2012.

[7] Source: CSO Statbank Table QNQ23.

Irish youth may have been particularly hard hit by the recession as figures from 2007 (reported by McGinnity et al., 2014) show that in the boom period young workers were over-represented in the construction and wholesale/retail sectors which were especially affected by the economic downturn. Additional disadvantages for youth seeking employment in time of recession are the increased probabilities of having low education, little or no experience and trying to 'break into' employment when there are few opportunities. Even in times of economic growth, Smyth (2008) argues that young people benefit less from increases in opportunities because of competition from more experienced/better qualified and previously inactive groups (from the labour market perspective) such as immigrant workers or women returning to the labour market from home duties.

2.3.1.2 CHANGES IN THE NATURE OF WORK

Most of the GUI Child Cohort at age 17/18 years are, as yet, on the cusp of entry to the labour market, and many may defer entry until after they have completed further education or training. Nonetheless, a consideration of the contemporary youth employment 'landscape' at this key transition phase is important. First, the extent to which the labour market is viewed as appealing by young adults may influence their decision to seek employment directly after school or continue with education and training. Secondly, young people may also evaluate different education options in light of how this will impact on their employment prospects in the short and longer term (e.g. has the recent proliferation of technology companies establishing their European bases in Dublin affected the percentage of young Irish people choosing related college courses?). Thirdly, for those who do enter the labour market straight after school, the trends in youth employment conditions are relevant to their well-being in that marketplace. Finally, even though small in number, the group directly entering the labour market on leaving school tends to experience multiple disadvantages in the form of low levels of education, living in more deprived neighbourhoods etc. so is an important group to understand from a policy perspective.

Although the Irish situation may be more acute than the EU norm, there is still concern about the wider issue of youth unemployment at a European level. O'Reilly et al. (2015) argue that the current period of youth unemployment in Europe is distinguished from previous historical periods on several characteristics starting with the increase in 'labour market flexibility' which has resulted in a greater number of temporary and part-time contracts being offered to workers, particularly to young people, with approximately 42% of European workers under 25 years being on a temporary contract. The difficulty of obtaining permanent full-time employment has obvious implications for job and financial security, and for being able to acquire one's own home. Additionally, O'Reilly et al. posit that temporary contracts are associated with lower pay, less on-the-job training, lower satisfaction and incomplete employment-related contributions which can have implications for later entitlements like some social welfare payments.

A second distinguishing characteristic of current youth unemployment identified by O'Reilly et al. (2015) is the importance of 'the family legacy'. One aspect of this legacy is the extent to which parents 'transmit' unemployment to their adult children via attitudes to work or structural economic inequalities associated

with their own employment status or where the household is located. On the positive side, parents may be an important resource for youth seeking work through network opportunities and the provision of emotional, financial and practical support through the job-seeking process and the early, unstable years of employment. The other characteristics of current youth employment identified by O'Reilly et al. are the mobility of the youth labour force between different countries of the EU; the mismatch between skills, education and employment; and the increased input to youth employment-related programmes by the EU.

Kalleberg (e.g. 2017) also notes an international trend in 'precarious work' in rich democracies which includes not just temporary work but also more informal work, 'gig economy' jobs and greater insecurity even for those with 'regular' jobs. He describes precarious work as that which is insecure and uncertain; offers limited income and benefits; reduced potential for improved jobs; and where a greater proportion of risk is borne by the employee relative to the employer.

Moving from the macro to micro level considerations, Smyth (2008) utilised the Irish School Leavers' Survey to examine the personal and family characteristics of young people who had or had not found employment at various points up to a year after leaving school. The School Leavers' Survey was a large, regular study of school leavers' experiences that has been running for many years. In her 2008 paper, Smyth contrasts patterns relating to employment from the pre-boom period (early '90s) and what turned out to be mid-boom (early '00s). Smyth found that "young men, those from working class backgrounds, those with non-employed fathers and those living in urban areas are more likely to enter the labour market immediately upon leaving school than other young people" (p.319). Smyth also found that direct entry to the labour market was associated with educational level, being more prevalent among those with lower-secondary qualifications in contrast to either higher-secondary or none; and for those with lower final examination grades. By the mid-boom period, most of the earlier influences remained significant but with a decrease in the impact of grades and an increase in the gender gap.

In terms of unemployment experience, Smyth (2008) finds that both occasional unemployment and continuous unemployment over the first year post-school were lower (roughly half) among the cohorts who left school mid-boom. While some experience of unemployment was not unusual at either time point, factors associated with a decreased risk of unemployment in that first year were coming from a professional or farming background, parental employment, having an upper-second level qualification, higher grades, and living in a rural rather than urban area. During the boom, the effect of social class and grades dwindled but other factors remained important.

In a more recent Irish analysis, Kelly, McGuinness, O'Connell, Haugh and Pandiella (2013) compared trends in youth employment between the latter part of the boom (2006) and the depths of the recession (2011). They find that among those aged 15-24 years, along with the previously mentioned rise in unemployment and NEET status, there had been a change in the association with gender, with young women more likely to be unemployed in 2006 but a greater risk for young men in 2011. Other factors

associated with greater risk during the recession were being non-Irish and having a qualification below Leaving Certificate level.

One alternative question is whether there are any upsides to unemployment in youth, and subsequently if the impacts are socially differentiated. There may be an argument that it is better to hold out for the 'right job' than take a less-desired job and find oneself on the wrong career path. Arguably, some individuals may perceive a low-paying job as not worth taking up if it will not adequately cover the cost of increased taxation, commuting, relocation, loss of benefits etc[8]. Nevertheless, the literature on the effects of youth unemployment come down heavily on the negative – especially over the longer term. O'Reilly et al. (2015) – citing Bell and Blanchflower (2011) – summarise the 'scars' of longer term youth joblessness as a legacy that "reduces lifetime earnings, increases the risk of future periods of unemployment, augments the likelihood of precarious employment, and results in poorer health, well-being, and reduced job satisfaction more than 20 years later". Elsewhere they note the potential short and mid-term impact of unemployment and precarious employment on an individual's ability to access credit and hence set up their own home, start a family and so on; and the emergence of a so-called 'boomerang generation' who move out of the parental home only to be financially obliged to return.

In their examination of youth unemployment in Europe, the Oireachtas Library and Research Service (2013) summarise not only the impact of unemployment on the individual in terms of lower income and social exclusion, but the macro-economic effect of lower tax revenue, the cost of welfare payments, and reductions in productivity, innovation and GDP. They also raise concerns in terms of the potential societal effects outlined by the literature such as greater pressure on public services, a more divided society and lower levels of political engagement among groups who may come to view themselves as disenfranchised.

In terms of policy, the Irish Government, in addition to general cut-backs on welfare entitlements during the recession, made additional cuts to the unemployment payments of young people. They also introduced a variety of schemes aimed at getting unemployed people back to work, some of which, such as the now-discontinued 'JobBridge' internship scheme[9], proved rather contentious

2.3.2 ECONOMIC RETURNS OF EMPLOYMENT VERSUS THIRD-LEVEL EDUCATION IN THE POST-SCHOOL PERIOD

The issue of youth unemployment tends to dominate the literature relating to young people entering the labour market directly after school and, in comparison, there seems to be a smaller body of work on

[8] Although note that a paper analysing Irish replacement rates for adults entering work by Savage, Callan and Walsh (2015) found that the majority of unemployed people would be better off in full-time employment; however, financial disincentives for returning to work included having dependent children, low potential wages and being in a 'jobless' household.

[9] JobBridge was a Government scheme whereby people who were on the live register could take up internships with employers while keeping their social welfare payment and with a small additional payment of €50. There was no additional payment from the employer to the intern.

actual employment. A review of existing research on both young people's and employers' experience of youth employment by Oxenbridge and Evesson (2012) explored several themes: awareness of the skills required for work, challenges faced by young people, improving work-readiness and employer supports for new young workers. In relation to skills awareness, they found variability in whether young people had a realistic view of the skills needed for work, but of more concern was a mismatch between the youth's and employers' views of whether young people actually did possess such skills. In the same study, the reported challenges in adjustment to working life included being daunted or intimidated by the new environment and responsibility, employers' unrealistic expectations of young novice workers given their lack of experience and getting used to the long working week. Unsurprisingly, then, work experience either through placements or part-time work emerged as one of the best ways of preparing young people for working full-time in a regular job. The types of workplace supports that were deemed effective included suitable induction processes – particularly those geared towards novice workers, mentoring and 'buddy' systems, as well as support from family.

Another question that could be posed in relation to youth employment concerns whether third-level education is worth the economic investment relative to taking up paid employment immediately after second-level (if paid employment is available). Assuming an individual is academically suitable for higher education, there are some apparent short-term advantages in terms of an extra 2-4 years of both earning an income while not paying tuition fees. An early entrant could also be further up the increment or promotion ladder relative to their peers entering the same labour market at a later point in time and with less experience. Over the longer term, however, the research tends to support the idea that there is still an economic advantage to delaying entry to the labour market in order to achieve a third-level qualification, particularly a degree. According to Abel, Deitz and Su (2014) the economic benefit of a college degree is best thought of as the extra wages a person can earn with a degree compared to what they could expect to earn without one. They calculate the economic return to a college degree (in the US context) to be in the region of 15% and estimate that the lifetime earnings of a worker with a bachelor's degree will exceed those of a high school graduate by more than $1m dollars. However, they also note that the economic return of a college degree varies considerably by the study area with degrees in engineering, maths, computers and health returning 18-21%; the social sciences around the 15% average and education as little as 9%. Of course, individuals likely vary in how much 'weight' they attach to the economic returns of higher education and may place greater value on a fulfilling or flexible occupation. Other factors that influence the decision on type of third-level course, and early school-leaving, are discussed in more detail in Chapter 3 'Education'.

The longer-term impacts of post-school choices may be more pronounced for members of the Child Cohort than for their parents or grandparents, as suggested by some American research. Taylor, Fry and Oates (2014) examined the impact of being college graduates on the 'Millennial' generation (i.e. those born after 1980 and aged 25-32 at the time of the study). They found that college graduates in that cohort earned on average $17,500 per year more than their peers with only a high-school diploma, and were more likely to be in full-time employment. College graduates were also more likely to have positive

attitudes to their current job in terms of feeling that they had a career and not just a job, they had sufficient education or training to get ahead and were "very satisfied" with their current job. Taylor et al. also noted that the advantage of a college degree for the Millennial generation is greater than for previous generations: 22% of Millennials with a high school diploma live in poverty compared to 6% of graduates and just 7% of 'Baby Boomers' with high school diplomas in 1979; and those high-school Baby Boomers earned 77% of graduate wages at the time compared to just 62% today. Both Taylor et al. and Abel, Dietz and Su (2014) comment that although recent college graduates may have it harder than previous generations as a result of the global economic recession, those with less education fare even worse. In the previously noted paper on Irish youth unemployment during the crash by Kelly et al. (2012), higher levels of education were an important protective factor among young people who were able to find or maintain employment in a difficult economic climate.

In the wider labour market context, there is some evidence that the level and type of skills required from workers has increased over time (Lerman & Schmidt, United States Department of Labor, 1999), including a shift towards greater use of technology and more service-based enterprise, compared to traditional manufacturing processes, which devalues motor skills in favour of cognitive and social skills. Therefore, further or higher education may be required even for jobs previously considered mostly or entirely manual and where direct entry to a workplace from school had been typical (Spitz, 2005). The increasing number of people who delay entry to the labour market because of continuing education immediately after school is consistent with the observed trends in terms of later transitions to living independently and becoming a parent (see Section 2.1 for a more detailed discussion).

When interviewed at age 13 years, only around half of the young people in this ***Growing Up in Ireland*** cohort expected to attain a degree-level qualification - but this was substantially lower than their parents' expectations for them (79% of mothers expected the child to attain a degree) and also lower than the national trends would predict (GUI Study Team, 2012). The then-13-year-olds' expectations for attaining a degree were lower among households with lower levels of maternal education, lower social class and lower income.

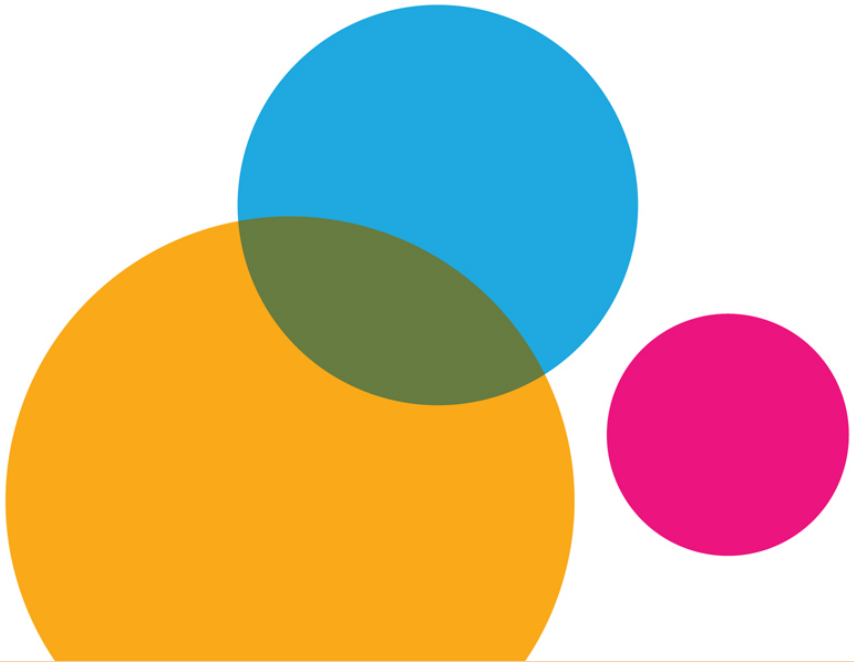
2.3.3 *GROWING UP IN IRELAND* AT 17/18 YEARS

The issue of employment is a new area of enquiry for this wave at age 17/18 years. There are several avenues to explore on this issue. Cross-sectionally there is the experience of young people who have already entered the labour market and are either employed full time or part time or looking for work. The questionnaire at age 17/18 included a special module on their current employment status, nature of the work and history of employment/unemployment. The survey also collects information on their educational qualifications, engagement with education at earlier waves and the employment characteristics of their family members both contemporaneously and in the past. Longitudinally, researchers will be able to look at those who are currently still in education and compare their later outcomes, both occupational and otherwise, with those who entered the labour market early. Utilizing GUI data offers the potential to track employment and career patterns: for example, do early entrants to

full-time employment show more or less social mobility than those who started later but with a college degree? ***Growing Up in Ireland*** data at 17/18 years and the planned 20 year wave should make it possible to examine the associations between crucial choices at this transition point and other aspects of life such as family life, physical health, confidence in State institutions, gender equality and life satisfaction (in addition to income and employment).

Chapter 3

EDUCATION



3 EDUCATION

For the majority of adults, the period around 17/18 years is principally noted as the time when they have left school and either started employment or training or pursued further or higher education . The topic of entering the labour market is covered in Chapter 2 of this report: this chapter will focus on education. A key feature of the Irish education system is the weight attached to the final State exams, known as the 'Leaving Certificate', which are essentially the main gateway to future education opportunities.

This chapter will first consider those young people who leave secondary school and who do not complete the Leaving Certificate exams: reasons why this might occur and what the implications of this pathway might be. In the second section, factors in the home, school and individual characteristics which influence performance on Leaving Certificate exams are examined. Finally, the third section reviews the literature in relation to the factors affecting choice of third-level courses. Additional background information on the operation of the Irish secondary school and university entry systems is provided in the Appendix.

3.1 EARLY SCHOOL LEAVING

The last two years of a young person's secondary education is a critical time for his/her future well-being and occupational mobility (Hampden-Thompson & Galindo, 2015). Early school leaving in an Irish context is defined as "leaving full-time second-level education before completion of the Leaving Certificate (Leaving Certificate Established, Leaving Certificate Vocational Programme, or Leaving Certificate Applied Programme) examination" (Byrne & Smyth, 2010, p.3). The aim of the European Union is to reduce the rate of early school leaving in the EU to no more than ten percent of 18 to 24-year-olds in 2020. Since the 1980s in Ireland, there has been a consistent decrease in the number of students leaving school early (Byrne & Smyth, 2010; DES, 2015b). Early school leaving rates in Ireland are lower than the current and envisaged EU average, with 91% of students who entered second-level education in 2008 completing their Leaving Certificate (DES, 2015b).

Early school leaving exerts substantial costs on the individual and on society and as a result is an issue that still needs to be addressed. Early school leavers are the most disadvantaged group in the labour market experiencing poor employment prospects, longer spells of joblessness, economic instability and lower job quality (Byrne & Smyth, 2010; Freeney & O'Connell, 2012). Smyth and McCoy (2009) found that early school leavers are three to four times more likely to be unemployed than individuals who remained in school and progressed to higher education. Furthermore, access to further and higher education is generally restricted to Leaving Certificate completers, especially those with higher grades (Byrne, McCoy & Watson 2009).

Due to the educational and in turn economic disadvantage experienced by early school leavers, they are at risk of experiencing a number of social inequalities (Byrne & Smyth, 2010). Early school leaving has been shown to have both a direct and indirect effect on health (HSE,

2008). Early school leaving is associated with chances of living below the poverty line which has, in turn, been associated with negative lifestyle choices including poor diet, lack of physical exercise, smoking and substance misuse (HSE, 2008). Young women who leave school early are at increased risk of becoming a lone mother (Freeney & O'Connell, 2011). Imprisonment rates among early school leavers are notably higher in comparison to individuals who have completed second-level education (O'Donnell, Baumer, & Hughes 2008). The disadvantages mentioned above have the potential to incur substantial costs to the State in the form of increased demands on social services, increased crime, decreased tax revenues, greater demands on health services and reduced social and political participation (Levin, 2009; Nevala & Hawley, 2011).

Early school leaving is not an event but rather a process (Eivers, Ryan, & Brinkley, 2000). This process is often gradual and is characterised frequently in terms of 'fading out' rather than 'dropping out' of school (Hampden-Thompson, 2013). Experiences dating back to early primary school education influence the likelihood of leaving school early, with individual, family and school factors having a cumulative impact over the whole of the young person's education (Byrne & Smyth, 2010). Some of the most influential factors are as follows:

3.1.1 SOCIO-ECONOMIC FACTORS

Research suggests that students from more socioeconomically disadvantaged backgrounds are more likely to leave school early in comparison to students from more advantaged socio-economic backgrounds and there are number of proposed reasons to explain this (Freeney & O'Connell, 2012; Byrne & Smyth, 2010; Jimerson, Egeland, Sroufe & Carlson 2000). As evident from previous waves of ***Growing Up in Ireland***, even at a young age (nine and thirteen years) young people from more socioeconomically disadvantaged backgrounds are more likely to have negative attitudes towards school and have lower aspirations for their future educational attainment (Williams, Thornton, Morgan, Quail & Smyth, in press). Williams et al. (2018) found that 35% of participants at age 13 whose primary caregiver had a degree level qualification liked school very much in comparison to 26% of participants whose primary caregiver had a Junior Certificate lower secondary education. Furthermore, the authors found that educational expectations reflected household income levels, with 38% of those in the lowest income quartile expecting to reach the Leaving Certificate at most in comparison to 16% of those in the highest income quartile. Despite education being free in Ireland, the costs associated with educational participation are considerable and often parents are unable to afford such expenses; this can have a negative impact on their children in relation to their participation and integration in school (Boldt & Devine, 1998, pp.7 - 39). Furthermore, Eivers, Ryan & Brinkley (2000) found that parents from professional backgrounds may have a greater appreciation of the benefits of schooling as they are more likely to have been through the process themselves. Therefore, they are more likely to support and encourage their children to persist in education.

3.1.2 INDIVIDUAL LEVEL FACTORS

There is a considerable body of research demonstrating that males are significantly more likely to leave school early in comparison to females (Croll, 2009). This is partly explained by the tendency of males to pursue training through apprenticeships. Furthermore, researchers (Stamou et al, 2014) have found that boys are more likely to disengage from education in comparison to females. Males may "adopt 'macho' masculinities that equate schoolwork to a feminine, inferior activity that is inappropriate for males" (Stamou, Edwards, Daniels & Ferguson, 2014). A lack of self-regulation skills (such as goal setting, paying attention, monitoring progress etc) may contribute to poorer academic performance and in turn disengagement from school (Archambault, Janosz, Fallu & Pagani, 2009). Part-time employment while at school may serve to encourage a young person to pursue full time employment rather than staying in education (Byrne, 2008). However, the likelihood of an individual leaving school early for employment depends on the current economic climate and in turn the presence/absence of employment opportunities (Raffe & Willms, 1989).

Students who perform well in school are less likely to leave school early; in comparison, students who have lower levels of achievement are significantly more likely to leave school early (Marks & Fleming, 1999). Furthermore, those from lower class backgrounds are more likely to leave school early (Byrne & Smyth, 2010). A number of other individual level factors have been found to trigger early school leaving such as: the young person's temperament (Cairns, Cairns & Neckerman, 1989), a difficult life experience such as parental divorce or death of a family member (Hampden-Thompson & Galindo, 2015), teenage pregnancy (Fine, 1986), being a member of a minority group such as Travellers (Byrne & Smyth, 2010) and substance misuse (Garnier, Stein & Jacobs, 1997).

3.1.3 SCHOOL PERSPECTIVE

Rumberger and Palardy (2005) found that once students' backgrounds had been controlled for, school policies and practices accounted for approximately 25% of the remaining variance in early school leaving rates. Factors such as high teacher expectations, an organised environment, involvement from parents, and commitment from staff all positively influence a school's effectiveness at producing better student outcomes, including low early school leaving rates (Smyth & McCoy, 2011).

The differentiation of students into different tracks or ability groups has been found to contribute in a major way to early school leaving (Berends, 1995). Byrne and Smyth (2010) found, using data from the Post-Primary Longitudinal Study, that students in mixed ability classes were less likely to drop out of school (7%) while the highest leaving rates were found

among those allocated to a lower stream[10] class (60%). Students are also more likely to remain in schools when there is a positive school climate, good relations between teachers and students, fair discipline procedures and a sense of ownership on the part of the students over school life (Smyth, 1999; Goldschmidt & Wang 1999). Research has found that students are less likely to drop out of school if they feel their teachers support their efforts to succeed in school and if they provide guidance. In particular, it has been found that those from more disadvantaged backgrounds respond best to teacher support (Byrne & Smyth, 2010). Social distance[11] from other students along with lower teacher expectations fosters student alienation and disengagement leading to early school leaving (Byrne & Smyth, 2010). In Ireland, school retention rates differ across school sectors. Voluntary schools[12], in comparison to vocational, community or comprehensive schools, have the highest retention rates at both Junior and Leaving Certificate stages (Byrne & Smyth, 2010; DES, 2015b). However, retention rates may reflect the composition of the student body rather than the impact of the school sector per se (Hannan, Smyth, McCullagh, O'Leary & McMahon, 1996). In particular, vocational schools have the highest rate of early school leaving and in turn, a disproportionate number of working-class students and those with lower academic abilities, who are at risk of early school leaving (Byrne & Smyth, 2010).

Many of the reasons for early school leaving are specific to Irish students but similar results have been found worldwide in Australia (Marks & Fleming, 1999), United Kingdom (Croll, 2009) and the United States (Rumberger, 1995).

3.1.4 INTERVENTIONS

European countries differ in their focus on preventative measures designed to keep potential early school leavers in the education system. However, Downes (2011), in areview of the international literature on preventive strategies, identified the following important factors for addressing early school leaving: attendance (monitoring of absenteeism), behaviour (alternatives to punitive disciplinary measures within school), attitudes (more positive teacher attitudes towards students), emotional/mental health supports (psychological supports available in school), cognitive achievement (individualised learning supports), motivation (recognition of achievements), family (financial support) and transitions (programmes to facilitate the move from primary to secondary level) (Downes, 2011).

Two particular initiatives that have been introduced to address early school leaving in Ireland include curriculum reform and targeted funding to schools catering for disadvantaged

[10] Streaming is the practice of allotting students to base classes according to perceived academic ability in line with their academic results.
[11] Social distance is the perceived or desired remoteness from peers. This may be due to exclusion, bullying or the individual's own shyness and anxieties.
[12] A voluntary school is a type of secondary school that is privately owned and managed.

populations. In terms of curriculum reform, in the mid-1990s there was an introduction of two programmes targeting students at risk of early school leaving: the Junior Certificate School Programme and the Leaving Certificate Applied. In relation to funding, the School Completion Programme was introduced to target young people age 4-18 who are at risk of leaving school early (Smyth et al, 2015). The School Completion Programme was subsumed by Delivering Equality of Opportunity in Schools (DEIS) in 2007. DEIS currently operates in 691 primary schools (with a roughly equal urban-rural divide) and 198 secondary schools. Evaluations of the DEIS programme point to improvements in literacy and numeracy test scores as well as school retention (Smyth et al, 2015). A number of schemes have also been introduced to encourage early school leavers back into education; these include the Back to Education Initiative and the Youthreach Programme. The Back to Education Initiative provides an opportunity for adult learners and early school leavers to re-enter education. The Youthreach programme is an education, training and work programme which provides early school leavers aged 15-20 with an opportunity to get a qualification (Smyth et al., 2019).

3.1.5 *GROWING UP IN IRELAND* AT 17/18 YEARS

This phase of ***Growing Up in Ireland*** captured more in-depth information about the young person's educational attainment and attitudes towards school. The survey collected information on their current status in relation to education. If the young person said they had left school early, they were asked the reason for doing so, if any family member had left school early and the likelihood of them returning to education in the next five years. Additionally, the young person was asked more detailed questions in comparison to previous waves on their attitudes toward school, teachers and the benefits of schooling. Furthermore, the survey included questions on employment, anti-social behaviour, crime, health and pregnancy which are identified as risk factors for early school leaving. These data have the potential to provide a more extensive picture of relevant factors and the impact of early school leaving in an Irish context. Going forward, following the next wave of data collection at age 20 years, it will also be possible to examine the short and medium-term consequences of early school-leaving.

3.2 FACTORS ASSOCIATED WITH PERFORMANCE IN THE LEAVING CERTIFICATE

In Ireland, at the end of second-level education students take a final examination known as the Leaving Certificate. The Leaving Certificate is a two-year programme during which students study a minimum of six subjects including Mathematics, Irish and English. The Leaving Certificate is an important exam for students because the results have an influential role in determining a student's access to further or higher education and in securing access to employment (Smyth et al, 1999; Byrne et al., 2009).

In 2015 57,929 students sat the Leaving Certificate examination. The majority of students sat the Established Leaving Certificate while 25.8% followed the Leaving Certificate Vocational

Programme[13] and a further 5% completed the Leaving Certificate Applied[14]. Results in the Leaving Certificate in 2015 were varied with the majority of students achieving between 350-445 points; 0.4% of students achieved 600 or more[15] and 8.2% achieved 100 points or less. With such disparity in the distribution of Leaving Certificate results, and due to the high stakes associated with the examination, there is a growing interest in identifying the factors that are predictive of Leaving Certificate performance. Similar to early school leaving, no single factor has been found to be predictive of Leaving Certificate achievement; rather it is the interplay of a number of factors during (or before) second-level education which are discussed below.

3.2.1 SOCIO-ECONOMIC FACTORS

There is a large body of research on the relationship between socio-economic status and academic achievement (Caldas & Bankston, 1997), with different dimensions of family background, including social class, status and parental education, all playing a role in influencing educational outcomes (Bukodi & Goldthorpe, 2013). The Longitudinal Study of Young People in England found that young people from lower socio-economic groups tended to have lower levels of academic achievement at GCSE (lower secondary) level in comparison to those from higher socio-economic groups (LSYPE, 2008). In an Irish context, there is a clear social class gradient in academic achievement with students from semi/unskilled or unemployed backgrounds scoring the lowest average points in the Leaving Certificate and those from professional backgrounds scoring the highest (Smyth et al. 2011). The overall social class intake of schools also has an association; with middle-class and mixed-intake schools achieving higher average points in the Leaving Certificate, and working-class intake schools achieving lower average points (Smyth, Banks & Calvert, 2011). Lower overall Leaving Certificate points in predominantly working-class intake schools may be the result of a number of underlying factors. For example, working-class families may not have the disposable income to pay for educational resources in the home (e.g. books, computer) or extra-curricular activities (e.g. summer courses, grinds) which have been associated with higher educational achievement (Hampden-Thompson, 2013). However, it has been shown that both a supportive home environment and encouragement from educators, particularly in times of failure, can encourage individuals from lower-socio-economic backgrounds to succeed academically (Finn & Rock, 1997).

[13] The Leaving Certificate Vocational Programme (LCVP) is not a stand-alone programme, but is taken as part of the Established Leaving Certificate. Students take at least five subjects, along with the three compulsory LCVP link modules.

[14] The Leaving Certificate Applied programme is a separate stand-alone programme of two years duration, with a particular emphasis on preparing students for adult and working life. It caters for students who prefer the practical approach over the purely academic approach.

[15] The maximum points possible is 625, which means that a candidate received six A1s (including in higher level Maths for which bonus points are awarded).

Evidence suggests that a mother's educational attainment has a positive effect on exam grades with students whose mother has been educated to university level performing better in the Leaving Certificate in comparison to students whose mothers have been educated to primary school level (Smyth, Banks & Calvert, 2011). It has also been shown that parents from professional backgrounds report higher expectations for their children with regard to their level of educational attainment in comparison to parents from working-class backgrounds (Schoon, 2010).

3.2.2 INDIVIDUAL FACTORS

Similar to any high stakes exam the Leaving Certificate creates a huge amount of worry and stress for students that in turn can impact performance (Banks & Smyth, 2015; Kruger, Wandle, & Struzziero, 2007). This stress can be beneficial for some students as it encourages them to work harder due to 'fear of failure' (Von der Embse et al., 2017). However, the fear of failure can result in increased anxiety in others, demotivating them to study and creating a debilitating effect during the exam (Von der Embse, Jester, Roy & Post, 2017). Data collected by the GUI in previous waves will allow for research and analyses into factors that could explain whether and how stress is beneficial or inhibiting, which in turn may make a contribution to early intervention and prevention policies. Gender differences in examination performance have generated much attention and debate in recent years, with perceived underachievement of boys in many education systems (Elwood & Carlisle, 2003). In the Leaving Certificate girls have been shown to outperform boys in the vast majority of subjects, even when controlling for age and family background (State Examinations Commission, 2015; Smyth, 1999). The higher rate of educational underachievement in boys can be partially explained by gender differences in classroom behaviours as boys are more prone to disruptive and inattentive classroom behaviours which impede learning, thus creating a male educational disadvantage (Fergusson & Horwood, 1997; Gutman & Schoon, 2012). Furthermore, girls are now investing more in their education and careers, and are aspiring to do well in examinations because of the economic benefit of college and improved labour market opportunities for women (Gutman & Schoon, 2012). Despite their higher levels of educational attainment, as a result of systems of education, national policy, and gender norms, many females are choosing school subjects and degrees which lead to "pink collar" jobs which in turn exacerbate gender inequality as such jobs are associated with poorer employment prospects and lower pay (Smyth, 2005; Delany, Gubbins & Redmond, 2009; Russell, McGinitty, & O'Connell, 2017; Charles & Grusky, 2004). Males are over-represented in some STEM-related subjects and a number of factors have been identified as relevant, such as lack of uptake from females, lack of encouragement, social norms and parental beliefs regarding female participation in STEM subjects (United Nations Educational, Scientific and Cultural Organization, 2017).

There is broad agreement in the literature that there is a significant relationship between cognitive ability and educational achievement. Deary, Strand, Smith and Fernandes (2007)

found that scores on the Cognitive Ability Test (CAT) taken at age 11 positively correlated with national school exam results at age 16 (GCSE[16]). Similarly, Smyth, Banks and Calvert (2011) found a positive relationship between test scores on the Drumcondra maths (r=.59) and reading test (r=.64) on entry to first year of secondary school and Leaving Certificate performance, with students who scored higher on the Drumcondra tests achieving significantly higher exam grades five to six years later. Furthermore, students' Leaving Certificate performance has also been found to be highly correlated with Junior Certificate performance (r=.86) with both exams assessing the same kinds of abilities and capabilities (Smyth, Banks & Calvert, 2011).

Self-efficacy[17] beliefs have previously been demonstrated to influence academic performance and persistence (Multon, Brown & Lent, 1991). Evidence suggests that students who have greater academic self-esteem and expect to do well in high stakes examinations perform better; however, the direction of the relationship remains unclear (Chevalier, Gibbons, Thorpe, Snell & Hoskins, 2007). Furthermore, perceived capacity to cope with schoolwork and educational aspirations are significantly associated with Leaving Certificate performance (Smyth, Banks & Calvert, 2011). Students who find the pace of instruction too fast in third, fifth or sixth year achieve lower Leaving Certificate grades (Smyth, Banks & Calvert, 2011). Additionally, educational aspirations at junior cycle are significantly associated with later performance with those aspiring to degree-level courses achieving higher grades (Smyth, Banks & Calvert, 2011). Furthermore, the student's own commitment to school-work is important. Students who have a more active social life or who have a part-time job during the Leaving Certificate years have been shown to achieve lower grades (McCoy & Smyth, 2004). In comparison, students who spend more time on homework and study in sixth year achieve higher grades (Smyth, Banks & Calvert, 2011).

3.2.3 SCHOOL FACTORS

There is a large body of international research which focuses on 'school effects' in academic performance (Teddlie & Reynolds, 2000; Kyriakides et al., 2018). School level processes which influence Leaving Certificate achievement include ability grouping, quality of teacher-student interaction and school expectations (Smyth, Banks & Calvert, 2011). Relationships with teachers play a considerable role in academic performance (Roorda, Koomen, Spilt & Oort, 2011). Good student-teacher relations in fifth and sixth year have been shown to be positively related to grades (Smyth, Banks & Calvert, 2011). Conversely, poor interactions with teachers across all years (except the beginning of first year) are negatively related to Leaving Certificate

[16] General Certificate of Secondary Education: exam taken by pupils at age 16 in secondary education in England and Wales.

[17] Self-efficacy is defined as belief in one's ability to succeed in specific situations or accomplish a task (Bandura, 1977).

performance. School average achievement has been found to affect individual academic self-concept (Nagengast & Marsh, 2011) – a factor related to educational aspirations and academic achievement (Guay, March, & Boivin, 2003). Schools where there are high expectations of students, with an emphasis on achievement and an exam focused approach, have better performance in the Leaving Certificate (McCoy & Byrne, 2011). Streaming (ability grouping) practices in schools limit students in lower ability classes to achieve high points in the Leaving Certificate as it limits opportunities and in turn students attain lower grades (Smyth, Banks & Calvert, 2011). Lower ability students who are placed in mixed ability classes have been found to achieve higher grades in the Leaving Certificate as they are encouraged to take more subjects at higher levels (Smyth, Banks & Calvert, 2011).

Students who take private tuition ('grinds'[18]) during the Leaving Certificate years achieve higher grades in comparison to other students who do not take grinds (Smyth, Banks & Calvert, 2011). However, this is not necessarily due to the impact of grinds as previous research has indicated that those who take private tuition are often those with the highest prior achievement levels and aspirations, and grinds are often undertaken by those from a higher socio-economic background (Smyth, Banks & Calvert, 2011). Students who complete Transition Year[19] also achieve higher Leaving Certificate grades (Smyth, Byrne & Hannan, 2005). This may be because Transition Year helps students to select Leaving Certificate subjects which reflect their interests and abilities thus contributing to better performance. Students who participate in Transition Year also have longer to acquire the skills which may enhance Leaving Certificate performance and in developmental terms the performance gain may reflect greater maturity of the students (Smyth, Byrne & Hannan, 2005).

While this review is primarily based on factors that influence performance in the Leaving Certificate examination, similar factors have been found to predict performance in State examinations in other countries. With respect to socio-economic factors, children from higher socio-economic backgrounds and children whose parents have a higher level of education (degree level +) achieve higher results in GCSE[20] exams in the United Kingdom (Goodman, Gregg & Washbrook, 2011) and higher SAT[21] scores in the United States (Camara & Schmidt, 1999). In relation to individual-level factors, Khattab (2015) found that individuals who had high expectations or aspirations performed better in the GCSE exams in comparison to those with low expectations or aspirations. Glaesser & Cooper (2012) also found that girls performed better than boys in almost all subjects at GSCE level. However, unlike the UK and

[18] Grinds provide supplementary tuition to students who attend mainstream secondary school on either a regular part-time basis (evenings or weekends) or on a 'block' basis (intensive revision course during school holidays).
[19] The Transition Year Programme is a unique one-year programme which can be taken after junior cycle and promotes the personal, social, vocational and educational development of students and prepares them for their role as members of society (Transition Year Guidelines, 1994, Department of Education).
[20] The GCSE is an academic qualification, taken in a number of subjects by students at age 15-16 in the UK.
[21] The SAT is a standardised test used for college admissions in the US.

Ireland, males in general achieve higher SAT scores in comparison to females; Hannon (2012) proposed this may be due to higher levels of anxiety among females or because females have lower expectations for their performance. Everson & Millsap (2004) looked at school-related factors which influence performance on SAT scores and found that the size of the school, number of individuals from lower socio-economic backgrounds and the ethnic composition of the school had an important influence on student achievement.

3.2.4 *GROWING UP IN IRELAND* AT 17/18 YEARS

Factors associated with performance in the Leaving Certificate may be examined using GUI data both cross-sectionally and longitudinally at 17/18 years of age as GUI collected data on exam grades and subject choices. Longitudinally, these results can be compared to, for example, attitudes and dispositions towards school and teachers at age 9 and 13 years. Furthermore, the Leaving Certificate outcome can be compared to results on the Drumcondra maths and reading test at age 9, and the matrices subset of the BAS (British Ability Scale) and the Drumcondra Reasoning test at age 13. Cross-sectionally, attainment in the Leaving Certificate can be analysed in the context of a variety of potentially protective and enabling factors such as participation in grinds, life outside of school, participation in Transition Year and family socioeconomic characteristics.

Although performance in the Leaving Certificate is not the be-all and end-all of an individual's options for further learning, education and realising of their potential, it is nonetheless an important gateway to many future opportunities. It is, in a real sense, a national competition between young people in a given cohort. Therefore, it is important for studies such as ***Growing Up in Ireland*** to look at how and what inequalities in Leaving Certificate outcomes arise and why, and what policy might do to level the playing-field.

3.3 FACTORS INFLUENCING COLLEGE AND COURSE CHOICE

In their final year of school, Leaving Certificate students face major decisions regarding their future. Some students decide to go straight into employment or training, but the majority of students progress to some form of further education (McCoy, Kelly & Watson, 2007). Decision making about course choice and destination for further or higher education is complex, involving characteristics and actions of both the student, their family, their secondary school and also the institution they are considering (McCoy & Byrne, 2011). A number of factors proposed to influence college/course choice will be discussed below.

3.3.1 APPLICATIONS TO FURTHER AND HIGHER EDUCATION IN IRELAND

Post-school options in Ireland include higher (third-level) education, further education and training (which is comprised of Post-Leaving Certificate courses, apprenticeships and other courses such as Youthreach for early school leavers) and direct entry to the labour market. Post Leaving Certificate courses vary in length from one year to three years and are provided in colleges of further education or second-level schools. Many PLC courses lead to a level 5

or 6 qualification on the National Framework of Qualifications and these qualifications can be used to access (some) higher education courses. The apprenticeship scheme is organised around competency-based standards with a modular structure. The on-the-job phases are funded by employers while the off-the-job phases are funded by the state.

Applications for undergraduate degree courses are centralised through the Central Applications Office (CAO). This system covers all courses within universities and institutes of technology at sub-degree and degree level with the exception of courses within the National College of Art and Design and a small number of non-State validated courses (Smyth & Hannan, 2007). In their application to the CAO, applicants select up to ten courses in order of preference. The CAO application system operates on the basis of numerus clausus. Applicants for a particular course are ranked in terms of their points and places awarded in rank order until all of the places are filled. Due to the variation over time in demand for different courses, the points required for higher education courses vary between fields of study and institution as well as from year to year (Smyth & Hannan, 2007). In 2015, 80,010 individuals made an application to the CAO (including Leaving Certificate applicants, mature students, foreign students etc.). 48,215 applicants received an offer and accepted it and 7,182 applicants applied but did not receive an offer; 13,777 received an offer but did not accept it and 10,836 were ineligible candidates (CAO, 2015).

The Higher Education Authority (HEA) estimated the 2011/12 higher education participation rate for 18/20-year-olds in Ireland at 52% nationally (HEA, 2015). However, there was marked variation by county (and by postal code within Dublin) and socio-demographic group. For example, it was 99% in Dublin 6 and just 15% in Dublin 17 (p.44, Table A.3.2). Another HEA source notes that the age distribution of new entrants to full-time higher education is heavily weighted in favour of younger entrants: in 2017/18, 36% were aged 18 or under and an additional 41% were aged 19 years (HEA, 2018, p.3) and a somewhat greater proportion (of all new entrants) were to universities (57%) than Institutes of Technology (43%). Another HEA report notes that 14% of new entrants to first year undergraduate courses in Ireland fail to progress to the second year of the course (Liston, Pigott, Frawley & Carroll, 2018); so while a very large proportion of young adults enter higher education, not all will complete their degree (or they may change to a different course). While these HEA reports do not detail what young adults do instead of higher education, a longitudinal study of a large sample of school-leavers conducted by the ESRI found that: around 10% did a Post-Leaving Certificate course, just under 20% entered employment, 7% continued in school (presumably to repeat the Leaving Cert) and around 5% became apprentices (McCoy et al., 2014). In line with the HEA reports, that study also found that just over half went directly into higher education in this 2007/8 period (ibid).

At present, Ireland's third-level participation rates are among the highest in Europe and there are political hopes to see these figures maintained and increased (OECD, 2018; DES, 2018).

However, it should be noted that some students do not achieve the points required for their course and, as a result, opt to repeat the Leaving Certificate with a view to achieving higher points (Smyth & Hannan, 2007). It is not unusual in Ireland for individuals to repeat their final year of school and to re-sit the Leaving Certificate examination with a view to achieving higher points; the proportion repeating is just under five per cent of the cohort (DES, 2016). See the appendix for further information about application to higher/further education.

3.3.2 INDIVIDUAL FACTORS

McCoy et al. (2014) found that wanting to study a subject that they are interested in is the most important factor for students when deciding on what college course to pursue. If a student is doing well in a subject and enjoys that subject at school, they are more likely to apply for a similar course in university (McMaster, 2017). For other students, many have aspired to a particular career path from an early age and these aspirations may have stemmed from hobbies or interests in childhood (Smyth, Banks & Calvert, 2011). Aspirations to continue to higher education can become established at a relatively young age. Results from an Australian longitudinal study found that a young person's intentions to complete school and continue to higher education at 14 or 15 years of age was an important predictor of actually doing so (Khoo & Ainley, 2005). Participants at age 13 in ***Growing Up in Ireland*** were asked about the highest qualification they expected to obtain by the time they finished their education and 51% of respondents expected to obtain a degree or postgraduate degree (Williams et al., 2018). However, studies have found that students can be unsure of what career path to pursue (Liston, Frawley & Patterson, 2016). At age 17/18, students can feel overwhelmed that they have to make a decision that will influence the rest of their life and many feel unprepared to make this decision (McCoy Smyth, Watson & Darmody, 2014).

Since the mid-1990s in Ireland, females have exceeded males in third-level participation rates (CSO, 2016). Females are 1.6 times more likely to apply to higher education in comparison to males, even after controlling for social background and prior academic ability (Smyth & Hannan, 2007). Gender has also been shown to play a crucial role in a student's course choice. Females are more likely to pursue humanities, art or health related courses; in comparison, males are more likely to pursue degrees in engineering, or computer science (Delany, Gubbins, Redmond, Harmon & O'Carroll, 2009).

3.3.3 FAMILY AND CONTEXTUAL FACTORS

Current trends in the labour market have been found to impact on students' course choices. The greater likelihood of employment in the degree area post-completion of college and good career prospects have been shown to sway students' decisions (Maringe, 2006). Students are often influenced by the annual media hype surrounding college courses and consequently have been found to rank courses according to the points required, ensuring they achieve a 'high profile' course (Gormley & Murphy, 2006). Nonetheless, course choice is heavily influenced by the student's ability to achieve certain points in the Leaving Certificate and in

turn enough CAO points to access the course (Keys et al, 1998). As a result, a majority of students select courses on their CAO form which they feel they could realistically obtain (Smyth, Banks & Calvert,, 2011).

Despite overall increases in the number of young people attending higher education, there remains a persistent underrepresentation of young people from lower socio-economic backgrounds (Anders et al, 2017). Research has shown that young people from higher socio-economic backgrounds are significantly more likely to carry on to higher education (90%) in comparison to those from working-class backgrounds (66%) regardless of school attended (Keys et al, 1998). A number of reasons have been proposed to account for the poor representation of working-class students in higher education. Lower levels of school completion for this group and poorer performance in the Leaving Certificate may mean a large number are not eligible for higher education (McCoy et al, 2010). Evidence suggests that parents of students from a working-class background are less likely to have attended higher education; therefore, students are more reliant on school-based advice and support (McCoy, Byrne, O'Connell, Kelly & Doherty, 2010). However, McCoy & Byrne (2011) found students from a working-class background felt they were not considered higher education 'material' by teachers and guidance counsellors. When working-class students were provided with information on higher education, it was focused on the mechanics of applying to the CAO rather on what they might like to do (McCoy & Byrne, 2011). As a result, students from a working-class background expressed feeling unequipped to face higher education choices or that higher education is not an option for them (McCoy & Byrne, 2011).

Family, in particular parental support, has an important influence on students' decisions regarding higher education participation. Parental support increases students' confidence to explore different options including options they might have previously thought to be inaccessible, for example, college abroad (Turner & Lapan, 2002). Furthermore, James (2002) found that parental education was the most reliable predictor of the aspirations of young people to attend university. At age 13, 69% of ***Growing Up in Ireland*** participants whose primary caregiver had a degree expected to get a degree themselves in comparison to 35% of those whose primary caregiver had a lower secondary education (Williams et al., 2018). Students have also been found to rely on the advice and experience of their older siblings, friends and their wider family. In some cases, positive/negative experiences of siblings in college can inform what courses/institutions students apply to (Goodman, Hurwitz, Smith & Fox, 2015).

3.3.4 SCHOOL AND COLLEGE RELATED FACTORS

Various experiences during second-level education can influence students' course/institution choices. The ethos of the school can have an influence on students. Research has demonstrated that more affluent schools hold higher expectations for students and encourage applications to university (McCoy & Byrne, 2011). Schools that engage in streaming

have a greater uptake of Leaving Certificate subjects at ordinary and foundation level; this limits post-school education pathways as certain college courses are unavailable to students if they study subjects at ordinary level (e.g. primary teaching requires higher-level Irish) (Smyth, Banks & Calvert, 2011). Work experience during Transition Year can have an influence on students' choice of a future career by allowing students to experience a range of possible career options (Hatcher & LeGallais, 2008).

International evidence suggests guidance counsellor provision such as individual guidance interviews, group work sessions and access to career-related information, can have a positive impact on the development of students' career choices (Morris, Golden & Lines, 1999). Career guidance plays a key role in helping students to decide what to do after leaving school by providing information on the range of higher education options available and advising students of potential courses they might be interested in (Smyth, Banks & Calvert, 2011). Career guidance counsellors frequently conduct aptitude tests with students to identify their abilities in a range of areas; and students have reported finding this beneficial in informing their decision of what course may be best suited to them (Smyth, Banks & Calvert, 2011). However, students have also expressed concerns about how late career guidance is provided in school as students are often unaware that they need certain subjects/subject levels to access a particular college course (Smyth, Banks & Calvert, 2011). By the time they are made aware it may be too late as Leaving Certificate subjects are usually chosen after the Junior Certificate (Smyth, Banks & Calvert, 2011).

A number of factors associated directly with the third-level institution have been demonstrated to be influential in students' choices for university (Kallio, 1995). College open days are beneficial as they enable potential students to get a feel for the university (Smyth, Banks & Calvert, 2011). Guest speakers attending schools are helpful as they provide students with a direct insight into the course and provide students with an opportunity to follow up on information received from their guidance counsellors (Smyth, Banks & Calvert, 2011).

Financial considerations may also play an important role in a student's decisions regarding university. Students are less likely to apply to higher education if the financial commitment is perceived as too great or will exert too much hardship on the individual or their family (McCoy & Byrne, 2011). The authors also noted that while a student maintenance grant is available for students whose parents' income falls below a certain threshold, many students are unaware of this, were concerned they would not be eligible for this grant or felt this would not be adequate. The location of the university is also important due to the costs associated with living away from home: students often decide to attend universities close to home or at least within commuting distance (Mattern & Wyatt, 2009). Other factors considered in terms of college choice include size of the institution, college reputation/prestige, course diversity, facilities and social life (Kallio, 1995).

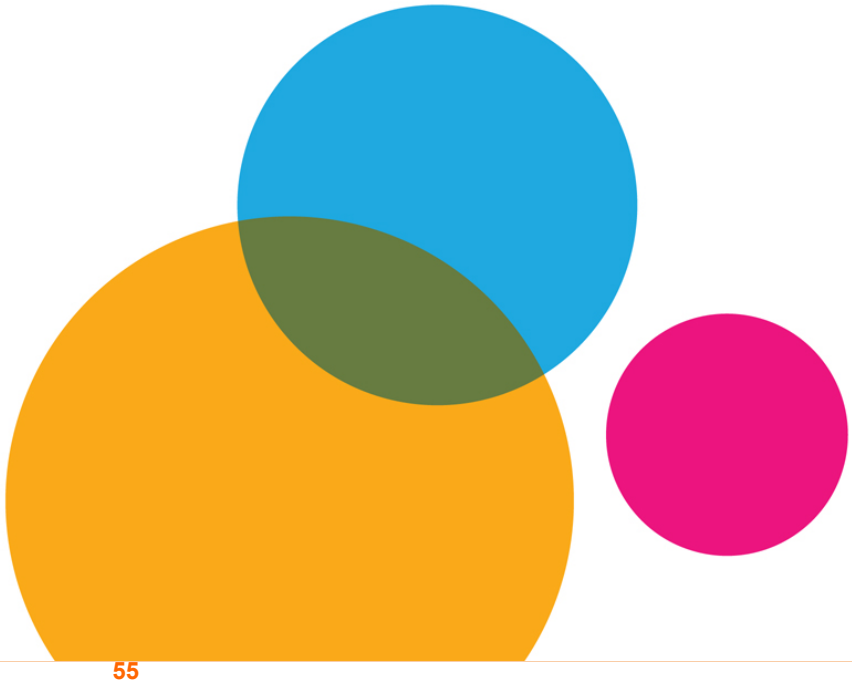
3.3.5 *GROWING UP IN IRELAND* AT 17/18 YEARS

This is a new section in the ***Growing up in Ireland*** study as the children are coming of age and making their future plans. If the young person had not yet started college, they were asked what they are most likely to do when they have finished school. If the young person intended to go to college, they were asked what course would be their first preference. Additionally, they were asked with whom they consulted to help them decide, if they used any resources such as university websites, college open days, career websites etc., and what influenced their choice (e.g. it would allow them to live at home, good reputation, size of the university etc.).

Growing Up in Ireland data can provide insights into the factors associated with particular educational trajectories from as early as 9 years old. A common theme in this review has been the extent to which a wide range of factors, from teacher expectations to societal expectations and gender norms, can support or constrain aspirations, school engagement, school performance and post-school options and opportunities from an early stage. Furthermore, by following individuals up at age 20 years – and possibly in later years – researchers can continue to assess the ongoing impact of early life experiences on outcomes for the cohort members.

Chapter 4

SOCIO-EMOTIONAL DEVELOPMENT



4 SOCIO-EMOTIONAL DEVELOPMENT

The period around 17/18 years is particularly busy in contrast to earlier childhood and is likely to be more stressful given the accumulative effects of the importance of impending exams, the wealth of potentially life-changing decisions to be made and greater interest/concern about physical appearance and the judgment of others. There is, however, much potential for personal growth and new experiences with the maturing of the peer and friendship network and new intimate relationships with 'significant others'.

This chapter on socio-emotional development starts with a discussion on the mental health challenges frequently associated with this age group. It moves on to look at the positive and negative aspects of peer relationships and influence. Finally, it looks at the socio-emotional aspects of romantic or 'dating' relationships for young adults.

4.1 MENTAL HEALTH CHALLENGES IN LATE ADOLESCENCE

4.1.1 OVERVIEW OF RESEARCH

A discernible increase in mental health problems occurs during adolescence and, in some cases, this signifies the beginning of a longitudinal course of mental health difficulties (Kessler et al., 2005). Such difficulties have deleterious consequences in a range of domains, including social and occupational functioning in later life. According to Martyn, Andrews and Byrne (2014), there is a limited amount of mental health research on 16- and 17-year-olds in Ireland (although see discussion of the My World Survey below), a group which may be particularly vulnerable to mental health problems as they emerge from childhood into adulthood and deal with the social, emotional and occupational challenges posed by this transition period. It is important to understand the developmental trajectories of mental health problems during adolescence, for interventions to affect relevant risk and protective factors and develop appropriate preventative and treatment strategies.

On a cross-sectional level, a recent large national study of youth mental health in Ireland made a significant contribution to our knowledge of mental health issues in the population aged 12-25 years: the My World Survey (Dooley & Fitzgerald, 2012) comprised two large samples, one of second-level pupils and one of young adults, with over 14,000 participants in total. Young people aged 17 years featured as part of both the second-level and young adult samples. Their main findings in relation to the prevalence of mental health difficulties were as follows:

- Levels of depression and stress (calculated using the DASS-21) tended to be higher among older adolescents/young adults; thus, scores for 16-17 -year-olds (8.3) and 18-19-year-olds (9.6) were between those for the youngest (12-13 years-olds (5.7) and the older 20-23-year-olds (10.0)
- Anxiety levels peaked at 16-17 years relative to younger 12-13-year-old children, then levelled off into early adulthood

- Increased frequency of alcohol consumption and cannabis use became evident at age 16-17 years, but increased further from the age of 18 years
- Self-esteem and optimism scores declined from early adolescence with the lowest point at 18-19 years before starting to rise again
- Self-reported levels of social support from family were at the lowest for young people aged 16-17 and 18-19 years, and lowest among 16-17-year-olds in respect of social support from 'a significant other'.

4.1.2 DEPRESSION

Returning to the international literature, with around 17% of adults experiencing a major depressive disorder (Kessler et al., 2003), depression is a significant health concern worldwide. Depression during adolescence is of particular concern as it is likely to persist into adulthood with significant disruptions to adult life (Thapar, Collishaw, Pine, & Thapar, 2012). Early adolescence is a period of vulnerability for depression. Pre-adolescent depression tends to be rare; Copeland et al, (2013) reported rates of 1-2% for those aged 9 to 12 years. The increase in rates of depressive symptoms from age 13 onwards is well-documented, with a particularly dramatic acceleration of incidence between 15 and 18 years of age (McLaughlin & King, 2015; Hankin et al., 1998). The experience of depressive symptoms may start some years prior to reaching clinical criteria for a disorder, however. For example, one longitudinal study of American girls found that early signs of depressive symptoms (as measured via a depression screening measure at age 8) were predictive of having a depressive disorder by age 10 and 11 (Keenan et al., 2008). Data from the TRAILS Dutch cohort study indicate that the average age of onset for diagnosable mood disorders is just over 14 years of age (Ormel et al., 2015).

Recent figures from the World Health Organisation (2017) estimate the current global prevalence of depressive disorders in the 15-19 year age group at approximately 4.5% for females and just over 3% for males; and a total population prevalence rate for Ireland of 4.8%. Looking beyond actual diagnosis to those simply reporting depressive symptoms, according to Lewinsohn and associates (1998), by age 18, 20% of adolescents report having experienced an episode of depression (Lewinsohn, Rohde & Seeley, 1998). In the secondary school sample of the Irish My World Survey (Dooley & Fitzgerald, 2012), the percentage of young people who scored above the normal range on a measure of depression (the Depression, Anxiety and Stress Scale, DASS-21) increased from just 23% among first year secondary students (aged 12-13 years) to 39% by sixth year (17-19 years). A similar trend was reported in a recent systematic review of the prevalence of depressive symptoms amongst young people, where an increase from early to late adolescence was widely observed (Schubert, Clark, Van, Collinson & Baune, 2017).

In keeping with the international literature, the My World Survey also found an increased rate of above-normal depression scores in girls with 76% of second-level boys in the normal range but just 64% of girls. In another study of Irish adolescents (living in rural areas), Martyn, Andrews and Byrne (2014) found that 5.5% of 16- to 17-year-olds had depression scores within a 'clinical' range, with girls demonstrating higher internalising and depression scores than boys (calculated using the Children's Depression Inventory, CDI).

4.1.2.1 RISK AND PROTECTIVE FACTORS

Despite high rates of prevalence, utilisation of mental health care services can be relatively low among adolescents; for example, while almost one in four subjects in Sund, Larsson, & Wichstrom's (2011) analysis of the Youth and Mental Health Study in Norway had life-time depression, less than 20% had been in contact with mental health care professionals. Among participants in the My World Survey (Dooley & Fitzgerald, 2012), 13% of 16-17-year-olds reported having serious problems in the last year with which they needed professional help but without seeking any, with an additional 7% saying they did seek help for their problems: the corresponding figures were even higher for 18-19 year-olds (19% and 12% respectively). When asked what sources of information or support they had used in relation to their mental health and well-being, those most frequently reported by the My World Survey young adult sample were the internet (55%), friends (52%), parents (45%), doctor/GP (22%) and psychologist/counsellor/therapist (18%). Unfortunately, cross-sectional research such as the My World Survey can only provide limited insight as to the development of depressive symptoms and hence longitudinal studies such as ***Growing Up in Ireland*** have greater potential to contribute to the task of identifying the various triggers that may initiate the development of depression during the adolescent period. This can provide information for the development of appropriate treatment and prevention models.

Some of the developmental challenges posed by the transition period of adolescence centre on shifts in family and social networks, which may act as a source of stress for some adolescents (Grills-Taquechel, Norton & Ollendick, 2010). It is well established that social support can act as a protective factor for mental health for both adults and adolescents. Low levels of social support are prospectively associated with depressive symptoms amongst adolescents, although the direction of this relationship is not always clear, with research suggesting that people who experience depression are less likely to seek support from others (e.g. Coyne, 1976). Longitudinal findings from the Research with East London Adolescents: Community Health Survey (RELACHS), which interviewed 11-14-year-olds at baseline and at two-year follow-up, indicated that low social support from family is significantly associated with depressive symptoms (Khatib, Bhui & Stansfeld, 2013). However, no significant effect was found for social support from peers, indicating that family members continue to provide an important source of social support for adolescents, despite the increased reliance during adolescence on peer social networks.

Martyn and colleagues (2014) found that family dysfunction, coping strategies and academic ability were all significantly associated with depression in adolescence. In the My World Survey, higher depression scores were particularly associated with the absence of "one good adult" whom the young person could rely on for support when needed (Dooley & Fitzgerald, 2012). Depressive scores in the young adult sample were also associated with excessive alcohol consumption, financial stress, non-heterosexuality, and not talking about problems.

Various other risk factors for depression during adolescence emerge from the literature; people who are frequently bullied during early adolescence are more likely to be severely depressed in later adolescence and adulthood, although strong social skills may moderate this link (Vassallo et al., 2014). Analysis of the BELLA cohort, the mental health module of the German National Health Interview and Examination Survey for Children and Adolescents (KIGGS), revealed that parental mental health at baseline (age 11-17) acted as a risk factor for depressive symptoms at one and two year follow up. Family climate, self-efficacy and social support acted as protective factors and positive changes in these factors were associated with development of fewer depressive symptoms over time (Klasen et al., 2015). An analysis of resilience in youth using a large American sample - which compared youth who had faced adversity but still achieved at least average success on three dimensions of academic achievement, social interactions with peers and avoidance of anti-social behaviour, with their peers who had not succeeded so well after disruptive experiences – noted the importance of both personal and family assets, including intellectual ability and 'effective parenting' (Masten & Reed, 2002, citing results from Masten et al.'s Project Competence).

As the ***Growing Up in Ireland*** cohort are interviewed on a wide range of topics both before and after probable onset of depression, the study affords opportunities for researchers to identify risk and protective factors in early adolescence which may influence depression onset and development over time.

4.1.3 OTHER MENTAL HEALTH CHALLENGES IN ADOLESCENCE

It is not just prevalence of depression which increases in adolescence but all psychopathology (Ormel et al., 2015; Dooley & Fitzgerald, 2012). Research on developmental trends indicates that anxiety also represents a significant concern during adolescence. In an analysis of data from the Tracking Adolescents' Individual Lives' Survey (TRAILS), Ormel and colleagues (2015) identified one in four adolescents as meeting the criteria for any anxiety disorder. More specifically, they found that generalised anxiety disorder (GAD) had a twelve-month prevalence of 1.8% and a lifetime prevalence of 2.9%, with an average age of onset of just over 13 years, although incidence rose steadily across adolescence. Prevalence and age of onset of the various anxiety disorders varied greatly; for example, most phobias had onsets before age 8 years and almost no new onsets occurred after age 14, while separation anxiety was likely to have onset before the age of 11, or between the ages of 14 and 17. Echoing patterns of gender differences in the development of depression, males had a substantially

lower risk for anxiety and mood disorders than females. In the My World Survey (Dooley & Fitzgerald, 2012), anxiety scores tended to increase from 12-16 years but then levelled off; 63% of young adults (aged 17-25 years) being in the normal range but with 14% in either the 'severe' or 'very severe range'. The large difference between this study and TRAILS can potentially be explained by differing methodologies in terms of measuring and defining anxiety. The former study used the Depression, Anxiety and Stress Scale (DASS-21) while the latter used the more comprehensive Composite International Diagnostic Interview (CIDI 3.0), both of which have been previously validated for diagnosis of anxiety (Nieuwenhuijsen et al., 2003).

As anxiety, depression and other mental health problems are prevalent during adolescence, it is important to be cognisant of the behaviours which may occur in parallel with these disorders; for example, self-harm. Self-harm is rare under the age of twelve, but engagement in self-harming behaviour increases rapidly during the teenage years and is a significant problem during adolescence (Perry et al., 2012). The prevalence of self-harm in England is estimated to be just over 13% among 15-16-year-olds (Kidger et al., 2015). As there is reason to suspect major under-reporting of self-harm to medical services, community-based studies are an essential source of information on the epidemiology of self-harm. Kidger et al. (2012) report that only 12% of 16-year-olds who reported self-harming sought medical attention after their most recent episode. In the My World Survey, 21% of young adults had ever self-harmed, about one-quarter of whom had done so in the past year; while Martyn et al. (2014) found that over 7% of 16-17-year-olds in rural Ireland report self-harming 'sometimes' or 'often'. Individuals who experience anxiety, stress or depressive symptoms are more likely to engage in self-harm (Dooley & Fitzgerald, 2012). Although there are a range of other risk factors associated with self-harm during adolescence, it has been consistently associated with lower academic attainment and is more common in girls than boys (Kidger et al., 2012; Mars et al., 2014; Stallard, Spears, Montgomery, Phillips & Sayal, 2013). Other factors associated with self-injurious behaviour include use of illegal drugs - particularly cannabis, smoking and alcohol use; lower socio-economic status; and being a victim of bullying (Kokkevi, Rotsika, Arapaki, & Richardson, 2012; McMahon et al., 2010). Longitudinal studies have found that self-harm is likely to persist over time: of the 10% of 12-16-year-olds in Stallard and colleagues' (2013) study who reported self-harming at least once in the previous six months, over half continued to report the behaviours six months later. Such behaviours are predictive of several adverse long-term outcomes. Those who engage in self-harm during adolescence are more likely to experience substance misuse, mental health difficulties, and poorer employment outcomes in adulthood (e.g. Mars et al., 2014).

4.1.4 *GROWING UP IN IRELAND* AT 17/18 YEARS

In ***Growing Up in Ireland***, detailed and sensitive information is collected from the young person on their mental health as part of the self-complete interview, with the aim of identifying what supports positive mental health trajectories and prevents negative mental

health trajectories. The instrumentation includes measures of depression, anxiety, stress, and self-esteem; in addition to questions that may reflect other mental health problems like anti-social behaviour. For the first time, young people are also asked if they have ever self-harmed and if so, how often in the past year and what form did this self-harm take. By comparing information on mental health and self-harm with extensive information over 3 waves on factors including socio-demographics, occupational and educational attainment, peer and family relationships, coping styles and self-efficacy, the study will afford a unique opportunity for researchers to examine the epidemiology of mental health problems and the risk and protective factors for self-harming behaviour in an Irish context. Similarly, positive mental health outcomes and associated factors can also be explored, thus helping to identify factors linked to positive mental health. Furthermore, the longitudinal design of ***Growing Up in Ireland*** permits an analysis of factors from previous waves to identify predictors of adolescent-onset mental health difficulties, as well as looking at the impact of such difficulties as the young person enters adulthood.

4.2 RELATIONSHIPS WITH PEERS

4.2.1 INTRODUCTION

Adolescence is a time when peer relationships are of crucial importance. During the teenage years, more time is spent with friends than with family and, while parents remain an importance influence during this time, peers become more and more embedded in the microsystem of the young person. During adolescence, peers have a multifaceted influence; they are an important source of social support and are closely linked to life satisfaction (Parkes, Sweeting, & Wight 2014) and self-image (Smyth, 2015). Research has consistently indicated that peer relationships play an important role in the social and personal development of an adolescent (see Ladd & Troop-Gordon, 2003, for a review). However, peers also have the potential to adversely influence the young person and may influence exposure to and/or engagement in bullying or risk-taking behaviours.

Brown and Larson (2009) summarise the main findings on the nature of peer relationships, based on over fifty years of research, as follows:

1. “Peer relations become more salient in adolescence”
2. “With the transition to adolescence, peer relations grow more complex”
3. “Friendships and friendships groups are characterized by similarity, which is a product of both partner selection and influence”
4. “Status or prestige is an important element of adolescent peer relations”
5. “Young people with good social skills are better adjusted than those with poor social skills”

6. "Social acceptance is also a good indicator of adjustment"
7. "Self-perceptions of peer relations or peer system are unreliable"
8. "Peer affiliations and peer reputations are only moderately stable"
9. "Peer influence is a reciprocal process"
10. "Studies of peer influence must consider characteristics of the influence agent, the target of the influence and the individuals' relationship" (pp. 75 – 78).

Furthermore, Brown and Larson (2009) point to the changing context for peer relationships in terms of the increasing importance of online engagement, both with close friends whom the young person also has contact 'offline' and friends or peer group that are exclusively online. They cite research by Valkenberg and Peter (2007) and Blais, Craig, Pepler and Connolly (2008), which suggests that internet communications between existing friends increase feelings of closeness but that (in the case of the latter study at least) interactions with strangers in virtual forums such as chat rooms are associated with reduced quality of existing friendships. An Irish study of social networking sites used by Irish children and adolescents (O'Neill & Dinh, 2015) found that 88% of 15-16-year-olds had a profile on a social networking site, and around a third had a profile on more than one site. More than a third of teenagers aged 13-16 years had more than 100 social network contacts.

4.2.2 PEER RELATIONSHIPS AS SUPPORT NETWORKS

At age 13 years, children in the ***Growing Up in Ireland*** Child Cohort already had extended groups of friends: when asked how many friends they normally hung around with, 19% said 'more than 10' and an additional 36% said 'between 6 and 10'. The number of these friends who were described as 'close' was fewer, however, with three-quarters having five close friends or fewer. Just less than 2% said they had no close friend and 1% said they didn't have any friends to hang around with. In the Irish part of the Health Behaviour of School-Aged Child (HBSC) survey 2010, overall only 53% of boys and 60% of girls aged 10-18 years reported positive relationships with their classmates (John-Akinola et al., 2010). There was a downward trend for older students: whereas 67% of girls and 60% of boys aged 10-11 years reported positive relationships with classmates, this was true for just 57% of girls and 50% of boys aged 15-17 years, placing Irish students at 18th amongst the 40 countries included in the study. Similarly, in the My World Survey (Dooley & Fitzgerald, 2012), another Irish study of adolescents and young adults (aged 12-25 years), self-reported levels of social support from friends was highest among 12-13-year-olds and declined with increasing age of the student (note this was a cross-sectional rather than longitudinal study which employed the Multidimensional Scale of Perceived Social Support). It is difficult to know why there seems to be a drop in the levels of social support received from friends reported by older adolescents

but it could be that more mature individuals critically evaluate such relationships in a different way to younger children

Nevertheless, the research literature suggests that peer relationships are positively linked to the well-being of young people. The same (HBSC) study referenced above found evidence of benefits associated with having positive relationships with classmates (John-Akinola et al., 2012). They were less likely to be current smokers (9% versus 14%) or to have been drunk (25% versus 33%); and more likely to report being physically active (53% versus 47%), in excellent health (38% versus 26%) and feeling happy about their lives (60% versus 38%). Students with positive classmate relationships also reported less frequent emotional symptoms (45% versus 62%) and less frequent physical symptoms (47% versus 61%).

In the My World Survey (Dooley & Fitzgerald, 2012) talking to friends about problems was an important source of informal support: 60% of young adult women (age 17-25 years) talked to friends about family problems whereas just 23% talked to family about such problems. Interestingly there was a gender divide here, with young men more inclined than young women to talk to family about family problems (42%) and just 37% talking to friends (about family problems). Roughly a quarter of young adults said they talked to friends about problems with depression.

A review of cohort study findings on resilience during transitions in the lives of children and young adults by Newman and Blackburn (2002) highlighted positive peer relationships as one of the most important factors – the others being supportive families, external networks and engagement in social roles that facilitated the development of self-esteem and efficacy. In a small American study using the Inventory of Parent and Peer Attachment (also used in ***Growing Up in Ireland***), Armsden and Greenberg (1983) found that peer attachment scores were associated with measures of self-esteem, life-satisfaction, depression/anxiety and resentment/alienation. When classified as having "secure", "ambivalent" or "avoidant" attachments to peers, the first group had better scores on each measure of emotional well-being. A small longitudinal study on the influence of family status, parenting, peer support and neighbourhood risk on the academic achievement of African-American adolescents found a positive effect of peer support on grades, although further analysis showed that this only applied in low-risk neighbourhoods (Gonzalez, Cauce, Friedman & Mason, 1996).

4.2.3 THE NEGATIVE INFLUENCE OF PEERS

The gradual increase in the influence of peers across adolescence coincides with an increase in risk-taking behaviour (Arnett, 2000), which at this age may include risky sexual behaviours, substance use, and other anti-social behaviours. A considerable amount of research has examined the association between peers and substance use and has consistently found that not only are young people more likely to engage in substance use when with friends, in addition, levels of substance use among young people are associated with the levels of substance use of their peers (Loke & Mak, 2013; Maxwell, 2002; Kirke, 2004).

Adolescents are more likely to engage in risk-taking behaviours in the presence of peers than when alone, and report higher rates of drinking at parties and with friends than in other settings such as with a date or partner or with adults (Bachman, Johnston & O'Malley, 2011; Dishion & Tipsord, 2011) (although the latter may be related to adult restrictions on alcohol consumption). Using data from the International Youth Development Survey, Eisenberg, Toumbourou, Catalano, & Hemphill (2014) found that prevalence of tobacco and cannabis use in Grade 7 (mean age 13 years) predicted use of these substances at two-year follow-up, controlling for participant's own use at baseline.

There are several plausible explanations for the links between the risky activities of peers and the engagement in risk-taking behaviours by the individual. One explanation is the desire during the formative years of adolescence for peer acceptance and social conformity (Knoll, Magis-Weinberg, Speekenbrink, & Blakemore, 2015). Another is attitude transference, whereby an individual adopts and absorbs the attitudes of peers; this is intrinsically linked to social learning theory (Bandura, 1977). Theories such as social learning account for the level of attachment to friends and propose that the intensity or closeness of friendships with others shape the extent to which these others influence behaviour. Brauer and DeCoster's (2015) analysis of data from the American National Youth Survey found that engagement in antisocial behaviours was predicted by an interaction of peer attachment and perceived attitudes of peers towards these behaviours. Specifically, perceived peer disapproval reduced offending among those who were strongly attached more than among those who were not strongly attached to peers. Conversely, adolescents who were strongly attached to peers who espoused risk-taking or anti-social behaviours were more likely to engage in these behaviours themselves. This indicates that the level of closeness to peers is an important factor in the absorption of attitudes and behaviours from these peers.

While it has been argued that peer influence leads individuals to adopt the attitudes of their friends, on the contrary, some researchers posit that young people select friends who are similar to themselves and already engage in similar levels of risk-taking behaviours (e.g. Osgood et al., 2013). There is conflicting evidence from longitudinal studies regarding whether selection or influence most adequately explains the adoption of various behaviours from peers. Osgood and colleagues (2013) tracked the self-reported alcohol use of over 9,000 adolescents over a three-year period and found evidence for selection rather than influence; i.e. young people tend to select friends who are similar to themselves in terms of alcohol use.

Individual differences may moderate peer influence on individual behaviour. Self-control is one proposed moderator of the influence of peer alcohol use on the individual; young people with low levels of self-control may be more susceptible to the influence of peers, whereas those with high self-control may be more likely to resist peer influences. Empirical evidence for the moderating role of self-control is somewhat inconclusive; Wills, Pokhrel, Morehouse, and Fenster (2011) found that self-control did moderate the relationship between peer and

individual alcohol use, whereas Visser, de Winter, Veenstra, Verhulst, & Reijneveld (2013) found no such moderating effect using the TRAILS Dutch Cohort Study. Visser and colleagues (2013) did, however, find an association between peer alcohol use and alcohol use and abuse in young adulthood. Substantiation of these pathways would have several practical implications, for example, the development of interventions to reduce adolescent alcohol use which include programmes aimed at enhancing self-control and learning skills to resist peer pressure.

Although a large amount of research has focused on peer influence in relation to alcohol use, other risk-taking behaviours or sexual behaviours may also be influenced by the attitudes and behaviours of peers. Aside from closeness to peers, discussed above, there may be a range of other potential moderators of these links, for example, the age of friends; Lam, Marteleto, & Ranchhod (2013) found that exposure to older peers influenced the age of first sexual intercourse of adolescents. This is perhaps because exposure to an older peer group, more likely to be sexually active, influenced individuals to become more sexually active themselves. It is necessary to consider selection here too; an individual may choose to join a specific (older) peer group based on their behaviour. Equally, reverse causality may somewhat explain this interaction, the influence between the individual and older peer group may be bi-directional such that joining an older peer group may affect the individual's behaviour too (Balsa, Homer, French & Norton, 2011).

4.2.4 *GROWING UP IN IRELAND* AT 17/18 YEARS

Growing Up in Ireland offers numerous avenues for exploration of topics relating to peers as sources of both emotional support and influencers of risky behaviour. Several questions are asked of the young person regarding their peers, such as the number of friends they have, the age of their friends and their levels of attachment to their friends (this last using subscales from the previously mentioned Inventory of Parent and Peer Attachment). Numbers of friends, both currently and previously, and the strength of the relationship with friends can be analysed in the context of a variety of other outcomes including socio-emotional well-being indicators, academic performance and general health. There is also potential for examining these in the context of peer and parent relationships given that research suggests the two may be related (e.g. Dekovic & Meeus, 1997).

In terms of risk-taking behaviours, rich data on the young person's perception of their friends' risk-taking activities were gathered. They were asked if they thought many of their friends have had sexual intercourse; if they have ever felt pressure from friends to have sex: and how many of their friends have smoked, been drunk, used cannabis or been in trouble with police. This information can be contrasted with the young person's own risk-taking behaviour. In terms of research based on interactive theories of development, such as Bronfenbrenner's bio-ecological model, peer relationships have potential as an important moderating or

mediating variable in analyses on topics like resilience and the effect of school experiences on outcomes, neighbourhood effects etc.

Another important research question related to aspects of the young person's relationships with peers is the issue of bullying. This topic is not discussed in depth here but has been previously reviewed in detail for an earlier publication on the literature relating to 13-year-olds (Morgan, Thornton & McCrory, 2016). At age 17/18 years, the young people were asked similar questions about bullying as used at 13 years, facilitating both cross-sectional and longitudinal analysis.

4.3 SOCIO-EMOTIONAL ASPECTS OF ROMANTIC AND INTIMATE RELATIONSHIPS DURING ADOLESCENCE

As early as Shakespeare's Romeo and Juliet, popular media has frequently referenced the importance and intensity of romantic, as opposed to friendship, relationships with peers in middle and late adolescence. Yet there is a comparative dearth of research on adolescent romantic relationships in contrast to such relationships in later adulthood or other peer and parental relationships in the teenage years (Meier & Allen, 2009). Instead the focus has often been on concern about the consequences of adolescent sexual activity rather than considering the whole of the relationship (the former is addressed elsewhere in this literature review in section 5.1 of this report).

Collins (2003) suggests that a number of 'myths' about adolescent romantic relationships have held back empirical research in this area: an assumption that such relationships are "trivial and transitory" (p.4); that they merely reflect other, more easily studied, relationships with peers or family rather than having unique characteristics; and a tendency to consider them as maladaptive in the context of an association with teenage drinking and school problems. Collins also suggests that a previous reliance on experimental paradigms as the 'gold standard' for research – and which are not compatible with real-life relationships – had further held back enquiry in this area. More recently, however, the availability (albeit limited) of good-quality questionnaires, surveys and data from other methods has helped to fill some gaps; and, it is hoped, the longitudinal data from ***Growing Up in Ireland*** will further contribute to knowledge in this area.

4.3.1 FREQUENCY

In his review, Collins (2003) draws on findings from the National Longitudinal Study of Adolescent Health in the USA. This study (citing Carver et al., 2003) found that there was a large increase in the frequency of romantic relationships in late adolescence (i.e. 17 – 18 years) with around 70% of this age group reporting a relationship in the previous 18 months: this compares to around half of 15-year-olds and 25% of 12-year-olds. Furthermore, the likelihood of having had a long-term relationship (i.e. lasting 11 months or more) also increased with age with nearly 60% of adolescents over 16 reporting at least one such relationship. In the UK, the ALSPAC longitudinal study found evidence of early starts to

romantic relationships with around a third of 12-year-olds reporting that they had ever kissed someone on the mouth, and higher percentages reporting having held hands or spent time alone with someone (Waylen, Ness, McGovern, Wolke & Low, 2010). In a recent Spanish survey of second-level students aged 15-21 years (mean age 17 years), Almanzor, Jiménez and Ruiz (2013) found that over one-third of their large (n=3,258) sample were in a dating relationship at the time.

In terms of Irish data, a small study (n=260) of second-level students in the Dublin area found that just under a third of young people aged 12 – 18 years described themselves as being currently involved in a romantic relationship (Kenny, Dooley & Fitzgerald, 2013). Turning to sexual intercourse, the Irish Study of Sexual Health and Relationships reported in 2006 that the median age for first (vaginal) sexual intercourse was 17 years among people then aged 18-25 years; and that over 80% of that age group had had sex (Layte et al. 2006). More recently, data from the Irish component of the Health Behaviour of School-Aged Children study in 2014 indicated that 31% of boys, and 21% of girls, aged 15-17 years had ever had sex (Gavin et al., 2015). Other regional Irish studies on age of first intercourse among late adolescent samples indicated a mean age of 15.5 years in the west of Ireland (MacHale & Newell, 1997); and a study in the Midlands found that three-quarters of adolescents first had sex between 15 and 17 years (Bonner, 1996).

Sexual initiation, both nationally and internationally, is discussed in extended detail in section 5.1 of this report. The impact of romantic relations is discussed later in this section, while the risks of sexual activity are discussed in section 5.1.

4.3.2 NATURE AND CONTEXT OF RELATIONSHIPS

As already noted, romantic relationships – particularly more enduring ones – become more common in late adolescence. Kuther (2007) describes 'dating' relationships – at least in the American context - as evolving from mixed-sex peer friendship groups through to eventual one-on-one pair relationships and activities. Collins (2003) distinguishes romantic from other peer relationships by greater intensity and expressions of affection, sometimes physical, that may include sexual relations. However, romantic relationships are not necessarily independent of the peer-group: selection of a partner may be influenced by the anticipated reaction of peers to aspects such as physical appearance, or there may be social pressure from a peer group to be in a relationship (see reviews by Kuther, 2007 and Collins, 2003). Interactions between a couple may take place within the context of wider peer activities – for example, whilst attending school – and be the subject of social commentary, perhaps with (more or less) helpful relationship advice being offered by said peers.

Collins' review (2003) also suggests five dimensions along which the nature of adolescent romantic relationships may be considered: involvement (age started, number and duration of relationships), partner selection, content (shared activities), quality (extent to which relationship is beneficial to the individual), cognitive and emotional processes (e.g. internal

representations of the relationship) and context. Almanzor et al. (2013) used these dimensions to describe four clusters of relationship type among Spanish adolescents: 'flirting' - characterised by shorter duration, more partners and less time spent together; 'going out with someone'; 'having a boyfriend/girlfriend'; and 'being in a serious/committed relationship'. The last two clusters tended to be characterised by longer duration of relationships, fewer partners and more free time shared together (involvement and content); but there were only some differences in aspects of quality and emotional processes.

Although it will not be possible to assess all of Collins' dimensions with the data available from ***Growing Up in Ireland*** at this wave, they provide a useful starting point for locating romantic relationships within the young person's wider social-emotional development. The current study will, in particular, be able to address some data gaps on the context dimension. According to Collins (2003), the wider socio-economic and cultural context influences the starting age of 'dating', the choice of partners, and what are considered behavioural norms. He cites Carver et al.'s (2003) findings on ethnic differences from an American longitudinal study which showed that Asian-American adolescents were less likely to report having a recent romantic relationship than those from White, African-American or Hispanic backgrounds.

Different ethnic, religious or socio-economic groups may have varying social norms regarding what is acceptable for romantic relationships in terms of starting-age, appropriate activities or suitable partner. For example, in the 2014 Irish HBSC study young people aged 15-17 years in higher social class groups were less likely to report having had sex (Gavin et al., 2015): 27% of girls and 35% of boys in the lowest groups reported they had already had sex compared to just 18% and 26% respectively in the highest social class groups. Other context aspects associated with experience of sexual intercourse for both sexes (aged 15 years and over) in the HBSC study were: older age, good communication with friends, poor neighbourhood environment, low participation in music and drama, and 'involvement' with alcohol, smoking and cannabis (Gavin et al., 2015). Additional predictors of sexual initiation before 14 years included being from a rural area, medication for psychological symptoms, poor communication with friends, bullying others, and alcohol or cannabis 'involvement'.

There may also be an influence of micro-contexts in terms of what is typical for a particular peer-network with regard to forming romantic relationships or engaging in sexual activity. ***Growing Up in Ireland*** will be in a position to consider not just ethnic, socio-economic and religious contexts but also factors relating to the peer group – including size, age, ethnic and gender mix but additionally whether the young person feels most of their peer group have had sex, and if they personally have felt pressure to have sex. A move to romantic relationships (with or without sexual activity)with other young people (or indeed with individuals who may be older than them) marks a significant shift in the dynamics of the micro-system at this age – with such partners potentially having considerable influence on the young

person. For example, it may open up connections to a completely new peer group (including possibly older individuals and more 'adult' activities). These developments may ultimately prove positive or negative influences on the young person's pathway.

Other studies also suggest an influence of individual family contexts. For example, in a longitudinal American sample of adolescent romantic relationships at age 15 years, Roisman et al. (2009) found that "high-quality experiences with parents and peers prior to and during adolescence tended to be negatively associated with indicators of intense engagement in this domain for the full NICHD SECCYD[22] cohort, but positively associated with the reported quality of adolescents' romantic relationships at age 15 for the sub-set of adolescents engaged in them" (p.1299). Elsewhere in the US, in her thesis Horne (2011) reports on data from the previously mentioned National Longitudinal Study of Adolescent Health such that the romantic ideals of adolescents with always-absent fathers differed from those whose father was never absent. Specifically, it appeared that the former were less interested in committed relationships and more interested in riskier sexual activity, with boys apparently more influenced by father-absence than girls. The author speculates that boys may suffer more from the absence of a suitable role model in terms of relationships and sexual behaviour, or that girls may find it easier to compensate for the loss of support through a closer relationship with their mothers. Previous research has linked the earlier take-up of adult roles to family break-up or transitions during childhood (Teachman, 2003). More generally, positive and negative experiences in the family context are likely to influence the quality of interactions in other relationships outside the home, including romantic relationships, such as through modelling of appropriate ways to deal with conflict and the development of secure attachments.

4.3.3 IMPACT OF ROMANTIC RELATIONSHIPS IN ADOLESCENCE

Both Collins (2003) and Kuther (2007) review a diverse range of outcomes associated with romantic relationships in adolescence. On the plus side, positive adolescent relationships can be associated with increases in self-esteem, good health, a sense of companionship and more positive expectations for future adult relationships. Such relationships also provide learning opportunities for developing sensitivity to the needs of others, capacity for intimacy and empathy, and contribute to overall identity formation. On the negative side, romantic relationships in adolescence, particularly early initiation, have been linked to increased smoking and drinking, behavioural issues and problems at school.

Early romantic relationships may also be associated with earlier sexual initiation (discussed in detail in section 5.1) (and theoretically increased risk for a crisis pregnancy or sexually transmitted disease). Research using data from the (American) National Longitudinal Study

[22] National institute of child health and human development: Study of early childcare and youth development.

of Children and Youth found that early (ages 13-14) reports of 'going steady' with someone was associated with increased likelihood of having had sex by age 15-16 years (Cooksey, Mott & Neubauer, 2002). Perhaps counter-intuitively, adolescent involvement in romantic relationships has been associated with increased risk for depressive symptoms in a large American study, especially for girls (Joyner & Udry, 2000). Similarly, in their small Irish study, Kenny et al. (2013) surprisingly found that high levels of support in a romantic relationship were associated with higher (i.e. worse) scores on a measure of psychological distress among adolescents aged 12 – 18 years. They speculated that individuals with more emotional problems might seek out greater levels of support. Collins (2003) speculates that such negative findings (such as that of Joyner & Udry, 2000) may reflect the emotional impact of relationship break-ups rather than the relationship per se. Break-ups with boy/girlfriends (or indeed regular close friends) can be traumatic for young people, particularly in the context of a lack of life experience that such things can be overcome in time or in the absence of appropriate coping skills. In severe cases, the break-up of a relationship may be the trigger for suicidal behaviour (Barber, Blackman, Talbot & Saebel, 2004).

4.3.4 *GROWING UP IN IRELAND* AT AGE 17/18 YEARS

For the first time, ***Growing Up in Ireland*** asked members of the Child Cohort about romantic relationships and sexual behaviours. Information is gathered about the young person's experiences and their perceptions of their friends' level of sexual experience. Such information can be considered in the context of the young person's other important relationships with friends and parents. In addition, there is a wide range of other contextual information available such as family circumstances, the parents' marital relationship and likely sources of social norms such as social class, religion and ethnicity. Cross-sectionally and longitudinally, engagement in adolescent romantic and sexual relationships can be analysed in the context of a range of positive and negative outcome measures, including depressive symptoms, anxiety, self-esteem, happiness and life satisfaction. For example: is there an association (either positive or negative) between romantic/sexual relationships and mental health issues; do longstanding romantic relationships in adolescence improve life satisfaction/happiness?

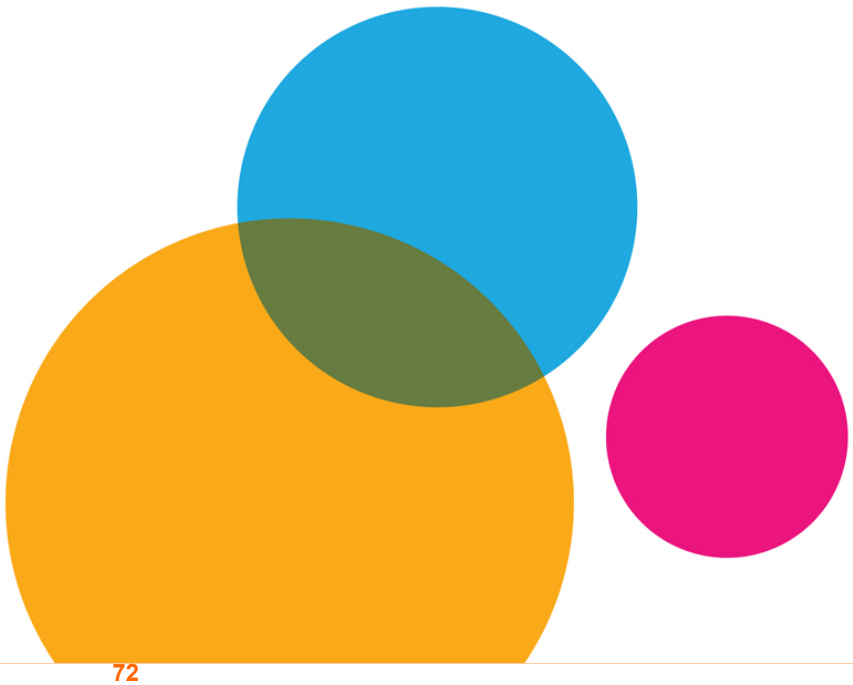
4.3.5 POSITIVE SOCIO-EMOTIONAL DEVELOPMENT

Positive socio-emotional development may support young people at this key life stage, enabling them to face challenges and transition positively into adulthood. Although pathways to competency in adulthood are understudied (Lopez, Pedrotti & Snyder, 2011), psychological research has begun to acknowledge the importance of considering factors that contribute to positive development (ibid.). Some factors that have been associated with positive development include the young person's sense of social connectedness and support (family, parent, peer), the young person's family structure (living in a two parent family is a protective factor increasing life satisfaction), social competency, positive physical health, gender equality (at the macro level), and academic success (Currie et al., 2009). Questions in the study

accessing these dynamics, as well as measures for life satisfaction, self-esteem, and locus of control, will enable research into the protective factors associated with positive mental health trajectories in adolescence.

Chapter 5

HEALTH



5 HEALTH

At age 13, most young people had good general health; 76% of young people were rated as very healthy, no problems by their parents. A further 23% were rated healthy, but a few minor problems. At 17/18 years, most young people should still be enjoying good health but with more independence and new experiences comes additional risks for injury and disease. This chapter continues from the last section of the previous chapter (on romantic relationships) by looking at the health-related issues associated with becoming sexually active.

The second section considers another important health issue for the Irish population in particular: that of alcohol use and misuse. Young people are legally able to buy and consume alcohol from the age of 18 years, but the available evidence suggests that most start drinking, and getting drunk, before this milestone, thus emphasising the need to investigate alcohol consumption habits at this age. Finally, this chapter looks at the issue of cardiovascular health for 17/18-year-olds as they enter adulthood, especially given the introduction of direct blood pressure measurements for the cohort members at this wave.

Whilst key physical health-related issues such as physical activity, screen time and diet are relevant to this cohort at all stages of life, they have not been included in this literature review. The topics discussed here (sexual health, risky behaviour and blood pressure) are simply a suggested selection of issues that are relatively new and thus increasingly relevant at this stage of the young person's life. Other core health issues, such as general health and obesity, are widely discussed in previous GUI reports and so are not repeated here. These topics are neither exhaustive nor prescriptive. Previous literature reviews for this cohort at both 9 years and 13 years discussed physical activity and diet in detail.

5.1 SEXUAL HEALTH AND BEHAVIOUR

First experiences of sexual intercourse are commonly viewed as important transitions in an individual's life, with a range of psychological and social consequences (Sandfort et al., 2008; Donahue et al, 2013). Initiation of sexual activity also has implications for physical health in terms of sexually-transmitted disease and pregnancy (planned and unplanned). For many years 'safe sex' - in terms of the use of barrier protection against disease and contraception to guard against unplanned pregnancy - has been a key policy issue both nationally and internationally. The focus of this section is on the health implications of sexual initiation and activity; a discussion of the socio-emotional development of intimate or romantic relationships is presented in a different chapter (section 4.3). A large body of research indicates that first sexual intercourse is likely to occur in adolescence (e.g. Manning, Longmore, & Giordano, 2005; Layte et al., 2006; Young, Burke, & Nic Gabhainn, 2018); thus it is appropriate that ***Growing Up in Ireland*** begins to explore sexual behaviour and its potential consequences at this wave of data collection with the 17/18-year-olds.

5.1.1 SEX AND THE IRISH CONTEXT

In Ireland, the legal age of consent for sexual intercourse is 17 years for both genders regardless of sexuality (Citizens Information Board, n.d.). Sex prior to this age is a criminal offence even if both parties are under-age and consenting[23]; however, females are not generally prosecuted (Criminal Law Sexual Offences Act, 2006)[24]. The age at which a person may make their own decisions about medical treatment (such as whether to go on "the pill") is 16 years (Citizens Information Board, n.d.). Medical treatment, including contraception, must be paid for unless the person in covered by a 'medical card'; just under 40% of the population have this type of coverage (http://health.gov.ie/publications-research/statistics/). The availability of emergency contraception (i.e. the "morning-after pill") has expanded in recent years with the introduction of pharmacy provision in 2011 (Pharmaceutical Society of Ireland, 2016). At the time of data collection at 17/18 years, abortion remained, with an extremely small number of exceptions, illegal in Ireland regardless of the circumstances of the pregnancy, although there was considerable public debate on the issue of abortion[25].

Historically, Ireland's public policy has been conservative in sexual health matters. Contraception (including condoms) was made legal in 1979 but only available on prescription from a doctor, and only for bona fide family planning purposes. Condoms were only made freely available to purchase in 1993. Homosexual acts between men were a criminal offence until 1993. However, in 2015 Ireland became one of the first countries to have a referendum on same-sex marriage (which was passed).

Another recent development was the National Sexual Health Strategy 2015-2020, aimed at increasing awareness of and access to sexual health information, education and services. The strategy also posits that improved open discussion in this regard will lead to improved sexual health, particularly amongst young people.

At the time of fieldwork there were several high-profile media campaigns promoting safe sexual practices; for example, 'Spunout.ie' as well as a dedicated 'thinkcontraception.ie' website operated by the national Health Service Executive (HSE) that runs in conjunction with a light-hearted television campaign with the tag-line "Johnny's Got You Covered". Despite such campaigns, however, there has been a worrying increase in sexually transmitted infections especially among younger people (Health Service Executive, 2014). For example, the incidence rate for chlamydia has increased dramatically in the last 20 years, and

[23] Note that the 'proximity of age' defence can be applied when there is 2 or less years between the individuals or if the person in need of defence is younger.

[24] Criminal Law (Sexual Offences) Act 2006, section 5 – "A female child under the age of 17 years shall not be guilty of an offence under this Act by reason only of her engaging in an act of sexual intercourse" http://www.irishstatutebook.ie/eli/2006/act/15/section/5/enacted/en/html

[25] Subsequently a referendum removing the prohibiton of abortion from the Constitution was passed and legislation was enacted to allow for abortion.

significantly, the 15-24 year age group accounted for more than half of all cases in 2014 (Health Service Executive, 2014).

5.1.2 SEXUAL INITIATION

The Irish Study of Health and Relationships (ISHR - Layte et al., 2006) represents a key principal survey on sexual knowledge, attitudes and behaviours undertaken at a national level in Ireland. The median age for first (vaginal) sexual intercourse was 17 years for those aged 18-24 years at the time of the ISHR survey, which is considerably lower than the comparable figure for older Irish adults; 22-23 years of age for those aged 60-64 at the time of the survey. For people who had ever had a homosexual partner (with genital contact), the median age of first experience was 16 years for men aged 18-24 years and 18 for young women. For young men this was a younger median than some, but not all, older cohorts; and a marked reduction for young women compared to older groups. These figures are supported by very similar findings from the Irish Contraception and Crisis Pregnancy Survey (McBride, Morgan & McGee, 2012) although the latter study noted that 15% of 18-25-year-olds reported never having sex and 28% of men and 17% of women had had sex before the age of consent (i.e. younger than 17).

As also noted in Section 4.3, the Irish Health Behaviour in School-Aged Children (HBSC) survey has also recently started collecting information on sexual activity from a large national sample of adolescents: in 2014, 31% of boys aged 15-17 years, but just 21% of girls, reported that they had ever had sex (Gavin et al., 2015). More recent data from the HBSC survey indicated that in 2018, 26% of males and 21% of females aged 15-18 years had initiated sexual intercourse (Young, Burke & Ni Gabhainn), 2018. There are also some estimations of the age of first sexual intercourse among Irish adolescents from region-specific data (see Drennan, Hyde, & Howlett, 2009 for a review). A study of 2,754 15-18-year-olds in the west of Ireland, conducted in 1994, found that the mean age of sexual debut was 15.5 years (MacHale & Newell, 1997). A similar study conducted the following year in the Midlands indicated that 75% of a sample of 1,645 adolescents reported having first sexual intercourse between the ages of 15 and 17 years (Bonner, 1996). Retrospective studies which have been used to supplement insights into adolescent sexual behaviour in Ireland suggest lower rates of first sexual intercourse before the age of 16; e.g. 12% of a sample of 247 third-level students (Lalor, O'Regan, & Quinlan, 2002).

The World Health Organisation has produced data regarding sexual behaviour from a range of countries (Wellings et al., 2006). The mean age of initiation of sexual intercourse is 17.3 years for men and 17.5 for women in the USA, 16.5 years for men and 17.5 years for women in Britain, and 17.5 years for men and women in Australia.

A range of factors have been identified as predicting earlier onset of first sexual intercourse, including biological (e.g. pubertal timing), social (e.g. peer pressure), and attitudinal factors (e.g. beliefs and perceived norms) (see Lammers, Ireland, Resnick, & Blum, 2000 for a brief

overview of these factors). In Lammers and colleagues' (2000) analysis, postponement of first sexual intercourse was associated with parental marital status, higher academic performance and higher socioeconomic status. In ISHR (Layte et al., 2006), factors associated with increased likelihood of having earlier vaginal sex were lower education, lower social class, and (for women) starting their periods before age 13 years. ISHR also found that people who were younger at first intercourse were less likely to report that both partners had been equally willing. In the 2014 HBSC survey of 15-17 year-olds, young people in higher social class groups were less likely to report having already had sex (Gavin et al., 2015): with 35% of boys and 27% of girls in the lower social class reporting they had already had sex compared to just 26% of boys and 18% of girls from higher social class background. The frequencies of reports for the middle group were 29% and 21% for boys and girls respectively.

Giordano, Longmore, & Manning (2001) note that there are a wide range of factors which may influence adolescent engagement in sexual activity, including sexual orientation and gender identity, and highlight the role of sexual activity and experimentation in adolescence as part of a process of establishing sexual identity. It is therefore important to consider the wider context in which adolescent sexual activity occurs, rather than focussing solely on whether or not adolescents have had sexual intercourse. Adolescents are at high risk for several negative health consequences associated with early and unsafe sexual activity.

5.1.3 SEX AS A 'RISKY' BEHAVIOUR

From a traditional risk/protective factors model, early adolescent sexual activity is often considered a problem or risk behaviour with a range of deleterious consequences for well-being, including the contraction of sexually transmitted diseases and the occurrence of unintended pregnancy (Kotchick, Shaffer, Miller & Forehand, 2001). Engagement in sexual activity with a person other than a steady romantic partner, often referred to in the literature as 'non-romantic sex' or 'casual sex', is quite common in adolescence, with a significant proportion of teens having sex outside of a steady romantic relationship (Crisis Pregnancy Agency, 2006). Having multiple partners increases the risk of sexual risk-taking behaviour and thus, of associated negative consequences (Overby & Kegeles, 1994).

In terms of gender differences, generally, research has examined the differences between young men and women in terms of the type of sexual behaviours they engage in and the contexts in which these occur. Young (college-age) males are reported as engaging in more casual sex than young females, which may reflect a compliance with social norms which view casual sexual activity as acceptable for males and unacceptable for females (Crawford & Popp, 2003). In Eisenberg and colleagues' (2009) study, which examined sexual activity in a group of young adults in Minnesota (mean age 20.5 years), 29% of males and 14% of females reported that their last sexual partner was casual (Eisenberg, Toumbourou, Catalano & Hemphill, 2009). Analyses of the 1995 National Survey of Family Growth, another US study,

indicates that almost one quarter of adolescent girls had their first sexual experience with someone they had just met (Manning, Longmore, & Giordano, 2000).

5.1.4 INFECTIONS AND ADOLESCENT PREGNANCIES

Participating in sexual activity with multiple partners consecutively or concurrently may present a greater risk for adolescents regarding unplanned pregnancy and exposure to sexually transmitted infections (STIs) (Ashenhurst, Wilhite, Harden & Fromme, 2017). The Health Protection Surveillance Centre of Ireland (HPSC) reports that the rate of STIs in Ireland has been increasing over recent years and that young people aged 15-24 years are disproportionally represented. In particular, the crude incidence rate for chlamydia has increased dramatically: in 2014 it was 145.9 cases per 100,000 compared to around 80 in 2006 and around 10 in the mid-90s – with the 15-24 year age group accounting for more than half of cases in 2014 (Health Service Executive, 2014). Chlamydia can often show no symptoms but longer-term complications include pain, bleeding, fertility problems and an increased risk of ectopic pregnancy for women (National Health Service, 2015). The crude incidence rates for gonorrhoea and herpes are also on the rise with young people aged 15-24 accounting for 43% and 39% of cases respectively; with both diseases also having the potential to cause serious health complications as well as shorter-term discomfort. In the ISHR study (Layte et al., 2006), fewer than 5% of people aged 18-24 years had been diagnosed with an STI – the overall rate for the sample was 3% of men and 2% of women. Being in a casual relationship (or none) and having sex before age 17 years were associated with an increased risk of an STI diagnosis in the ISHR study.

The rate of teenage pregnancy in Ireland has declined from 20 births per 1,000 females aged 15–19 years in 2000 to 9 per 1,000 in 2014 (HSE, 2015). Looking specifically at crisis pregnancies[26], the ISHR study (Layte et al. 2006) found that over half of young women aged 18-24 who 'had ever been pregnant' experienced a crisis pregnancy (note that this is a much smaller group than the total proportion of women aged 18-24 years in the sample). A crisis pregnancy can result in emotional distress and consequences in terms of educational and employment plans, and one-parent families (if that is the result) are at greater risk of poverty (Watson, Maitre, Whelan & Williams, 2014). In the ISHR study, just under three-quarters of women aged 18-24 who had a crisis pregnancy became a parent as a result with the remainder concluding in either abortion or miscarriage.

[26] A crisis pregnancy is a pregnancy which is neither planned nor desired by the woman concerned, and which represents a personal crisis for her. A planned or desired pregnancy can develop into a crisis pregnancy over time due to a change in circumstances. The most common reason for a crisis pregnancy is because it is unplanned or unwanted; however it may also include a pregnancy that was wanted/planned but becomes a crisis due to a change in circumstances.

The use of condoms and oral contraceptives are crucial to the prevention of STIs (condoms only) and unplanned pregnancies. Ford, Sohn and Lepkowski (2001) found that American adolescents make decisions about contraceptive methods based on the nature of the relationship with their partner, with teens who have sex with non-romantic partners less likely to use condoms or other contraceptive methods. In the ISHR study (Layte et al. 2006), over 90% of men and women aged 18-24 years said they used contraception for their most recent sexual intercourse. Of those who didn't, the most common reason was 'alcohol/drugs', followed by 'no contraception available', 'sex not planned' and 'didn't think to use'. Findings from ISHR in relation to condom use showed that around half of 18-24-year-olds reported that they had used a condom every time they had sex in the past year. Condoms were more consistently used by young men than young women. According to the Health and Behaviour in School-aged Children Study, 25% of Irish 15-year-old females used the contraceptive pill at last intercourse at age 15. Around 65% of 15-year-old male and females used a condom at last intercourse (HBSC 2016). By age 17, condom use was reported by 80% of young people and 17% reported using the birth control pill (Young, Burke, & Nic Gabhainn, 2018).

5.1.5 *GROWING UP IN IRELAND* AT AGE 17/18 YEARS

With the data collection from 17- and 18-year-olds, ***Growing Up in Ireland*** has the potential to provide a baseline of information about sexual activity for this cohort a decade on from the influential ISHR study. Extensive information has been gathered from the young people, including questions on relationships and number of boyfriends, girlfriends and sexual partners, their level of sexual experience, relationship with their first sexual partner (where relevant), and use of contraception. Sexual activity and practices as a risk for physical health – such as failure to use condoms - can be examined in terms of socio-demographic and developmental characteristics to identify groups of young people who may benefit from early or improved sexual education, or other policy interventions. Gauging the degree of discourse and knowledge regarding sexual health in this cohort may allow for the development of policies to increase conversation and improve understanding about sexual health. Longitudinally it will be possible to assess the role of sexuality and sexual health in late adolescence as a factor in physical, emotional and educational outcomes as the cohort enters adulthood as well as the role of parental relationships, parent-child relationships, stressful life events, substance abuse, and mental health as factors in sexual behaviour.

5.2 TRENDS IN ALCOHOL CONSUMPTION AMONGST IRISH ADOLESCENTS

Alcohol consumption is linked to a wide range of medical conditions including cancer, cardiovascular disease and premature death (Murphy, et al., 2016b). It is also the number one cause of death amongst young people aged 15 to 49 in the UK (Burton et al., 2016) and one of the leading preventable causes of death and injury worldwide (Rehm et al., 2009).

In Ireland if you are under 18 years of age, it is illegal to buy or consume alcohol, unless you are consuming it in a private residence and with parental consent (Intoxicating Liquor Act,

2008). The age of onset of alcohol consumption, an important predictor of later alcohol misuse (Pitkanen, 2005; Department of Health, 2012), has lowered significantly among Irish adolescents in the last two decades (Smyth, Kelly & Cox, 2011), with Irish teens also amongst the highest ranked group in Europe in terms of drunkenness (ESPAD Report 2015: Results from the European School Survey Project on Alcohol and Other Drugs, 2016).

Overall, the excessive consumption of alcohol is an Irish stereotype that regrettably has some foundation; drinking appears ingrained in the country's culture and can seem almost essential to social life in Ireland (Drinkaware, 2017). Extensive policies and interventions have been developed to target harmful drinking for Irish teens and adolescents, although there is limited evidence of sustained success (Bendtsen et al., 2014).

5.2.1 TRENDS IN ALCOHOL CONSUMPTION

Many studies have investigated alcohol consumption trends amongst young people in Ireland. The Irish Health and Behaviour of School-aged Children (HBSC) Study reported patterns of alcohol consumption for young people aged 10-17 years old in 2014 (Gavin et al., Dec 2015). Amongst boys, 82% aged 10-11 had never had an alcoholic drink but this figure dropped to 71% for 12-14-year-olds and just 32% for 15-17-year-olds. A similar pattern was observed for girls, with respective values of 91%, 77% and 34%. For boys and girls aged 10-11 years, 0.4% and 0.3%, respectively, reported having been drunk in the last month. Respective figures for 12-14-year-olds were 2.5% and 2.8%, but rates increased significantly when looking at 15-17-year-olds, 21.8% for boys and 19.9% for girls. Although this represented an eightfold increase in reported drunkenness compared with 12-14-year-olds, it was markedly lower than the rate of 36.67% reported by all 15-17-year-olds in the 2010 HBSC survey (Department of Children and Youth Affairs, 2016; Kelly et al., 2012), further emphasising the recent reduction in alcohol consumption. Both results, drunkenness in the last month and having ever drunk alcohol, point towards a substantial change in drinking behaviour at around 14-15 years of age. Further evidence of this change is observed when looking at those who reported ever having been 'really drunk'. Less than 2% of 10-11-year-olds had ever been 'really drunk', but this figure rose to 7.3% for 12-14-year-olds and then increased more than fivefold to 40.8% for 15-17-year-olds.

Another report commissioned by Alcohol Action Ireland established that 64% of 13-17-year-olds in Ireland had previously had an alcoholic drink; 54% of 13-15-year-olds and 75% of 16-17-year-olds (Alcohol Action Ireland, 2016a). Of these, half reported drinking at least once per month and 37% had engaged in binge drinking in the previous month (including 50% of 16-17-year-olds); binge drinking being defined here (and by the WHO) as consuming six or more 'standard' drinks at once. Amongst the 64% who had drunk previously, 27% of 13-15-year-olds had been 'really drunk' before, and this figure rose to 71% for 16-17-year-olds who had drunk previously.

In a recent systematic review of 29 studies investigating alcohol use by Irish and UK college and university students (Davoren, Demant, Shiely & Perry, 2016), seven of the 29 studies used the WHO's AUDIT alcohol screening test and reported that the vast majority of all students, somewhere between 63 and 84%, were classed as hazardous drinkers or worse. Hazardous drinking is described by the WHO as "a pattern of alcohol consumption that increases the risk of harmful consequences for the user or others" (Bohn, Babor & Kranzler, 1995; Babor et al., 2001). According to the Central Statistics Office, people in Ireland aged 15 and over (including adults) consume 11.46 litres of pure alcohol per capita per year (Alcohol Action Ireland, 2016b). Whilst this represents a 4.8% increase from 2015, it is important to note that overall there has been a 19.6% decline in alcohol consumption in recent years, steadily reducing from a peak of 14.3 litres in 2001. Prior to that, alcohol consumption in Ireland had increased almost threefold from 1960 (4.9 litres per capita) to 2000 (14.1 litres per capita).

The My World Survey of alcohol behaviour and mental health included two cohorts of Irish students, a second-level group aged 12-19 years (n=6,085) and a post-second-level group of 17-25-year-olds (n=8,221) (Dooley & Fitzgerald, 2012). Amongst the second-level cohort, 79% were considered 'normal' drinkers (includes non-drinkers), 15% were 'problem' drinkers, 3% were 'hazardous' drinkers and 3% were possibly alcohol dependent (based on AUDIT tool definitions). For all but the first category, rates increased from 1st year to 6th year; for example, 3% of 1st year students were 'problem' drinkers compared with 34% of 6th year students. In the older post-second-level cohort, a worrying shift was observed for all categories of drinker. Thirty-nine percent were 'normal' drinkers, meaning 61% of young adults were non-normal drinkers; the latter included'problem' drinkers (41%), 'hazardous' drinkers (10%) and possibly alcohol dependent (10%).

Overall in this study, a pattern was observed of steadily increasing alcohol consumption from age 12 to 21 years, followed by a slight reduction up to 25 years. Asked whether they binge drank weekly, 3% of 12-13-year-olds answered 'yes', compared to 14% of 16/17-year-olds, 39% of 20/21-year-olds and 29% of 24/25-year-olds. Similar patterns, a steady increase up to age 21 followed by a slight reduction up to 25, were observed when the students were asked about whether they drank weekly and how many alcoholic drinks they consumed weekly.

5.2.2 AGE OF ONSET

Age of onset of drinking is an extremely important consideration when investigating alcohol consumption behaviour as early onset age is associated with an increased risk of hazardous alcohol consumption and drug abuse in later life (Department of Health, 2012). According to a Health Research Board survey, 64% of males and 51% of females started drinking before they turned 18 (Long & Mongan, 2014).

Citing the substantial increase in alcohol consumption amongst adults in Ireland over the last four decades, Smyth and associates aimed to investigate changes in the age of drinking onset in Ireland (Smyth, Kelly & Cox, 2011). Overall, a steady decline in age of onset was observed,

with a 3.5 year drop in age of onset from 1983 to 2003, leading to a current mean age of onset in Ireland of approximately 15 years of age.

The authors suggested that age of onset seems to be affected by the same factors that affect alcohol consumption levels, including society's overall attitude towards alcohol; as alcohol consumption becomes more pervasive and normalised, the age of onset of alcohol consumption tends to drop. The Department of Health Steering Group Report on a National Substance Misuse Strategy (2012) noted that age of onset was negatively affected by advertising and marketing, leading adolescents to drink earlier in life.

The HBSC study (2009) reported that less than 5% of young Irish people were age 13 or younger when they first got drunk (Currie et al., 2012). They reported a gender difference between those who drank alcohol at least once a week in Ireland (males: 5%, females: 3%), lower than the overall international HBSC average (males: 10%, females: 6%). According to the subsequent HBSC report in 2014, 23% of young Irish people had an alcoholic drink by age 13 (28% of boys compared with 20% of girls). This rose to 83% at age 17 (82% of boys compared to 84% of girls) (Perry, Keane, Gavin, & Nic Gabhainn, 2014). Alcohol action reported that 54% of 13-15-year-olds in Ireland have 'drank alcohol previously', rising to 75% for 16-17-year-olds. (Alcohol Action, 2016a)

Looking specifically at the ***Growing Up in Ireland*** cohort at age 13, the vast majority (85%) reported never drinking alcohol before (GUI Study Team, 2012). Of the 15% who had drunk previously, 8% had consumed a whole alcoholic drink in the last year, although it occurred rarely or only on special occasions. Less than 1% said they drank alcohol more than once per month.

5.2.3 INTERNATIONAL COMPARISONS

Whilst alcohol consumption has decreased from 2000 to 2015 in both Ireland and Europe, it has increased worldwide; primarily explained by a significant surge in consumption in Asian countries (World Health Organisation, 2014). Regardless, Europe remains the heaviest drinking region in the world. Even within Europe itself, contrasting trends in alcohol consumption can be observed, with northern Europeans more inclined to drink heavily and get drunk, and southern Europeans drinking alcohol more frequently, but not as heavily (Currie et al., 2012; Hibell et al., 2012).

According to the most recent report from the European School Survey Project on Alcohol and Other Drugs (ESPAD), which includes 49 countries and 96,046 participants, an average of 80% of all students (aged 16) had drunk alcohol before (ESPAD Report 2015: Results from the European School Survey Project on Alcohol and Other Drugs, 2016). Looking specifically at Ireland, 74% reported having previously drunk alcohol. However, when asked how much alcohol they consumed the last time they drank, Irish students ranked 4th highest, consuming 6.0 centilitres of alcohol (one centilitre of alcohol = one unit), compared to a European average

of 4.7 centilitres. The study noted that while lifetime alcohol use rates were still high throughout Europe, temporal trends point towards an overall reduction between 1995 (89%) and 2015 (81%).

The Health and Behaviour of School-aged Children (HBSC) study is a long-running international study involving 45 countries from both Europe and North America, including Ireland. According to a 2014 report from the study involving 145,671 13-15 year olds, drunkenness rose from 18% at 13 years to 47% at 15 years, while weekly drinking went from 8% to 21% (Bendtsen et al., 2014). Respective figures for Ireland were 14% to 42% for drunkenness and 5% to 13% for weekly drinking, slightly lower than the study average. However, at 43%, Ireland ranked highest in terms of male binge drinking, compared with an overall average of 15%. Another HBSC study highlighted an overall decrease in alcohol use in most countries between 2002 and 2010 (Looze et al., 2015). Only in Eastern European countries did they report increasing alcohol use, which may be explained by recent increases in wealth and adolescent financial independence.

5.2.4 PARENTAL INFLUENCE

There is strong evidence of a link between parental and child drinking habits. According to a study of adolescent drinking behaviour in Ireland, 17-year-olds were significantly affected by parental drinking habits; they were three times as likely to be classed as hazardous drinkers if their fathers were also hazardous drinkers (Murphy et al., 2016b). Another Irish survey investigating parental attitudes to their children's drinking found that the vast majority (90%) of parents were concerned about their children binge drinking and only a small proportion (11%) had allowed their 16-17-year-olds to drink at home (Smyth, Kelly & Cox, 2011). The author noted that those parents with the most liberal views regarding their children's drinking were predominantly regular drinkers too. In the international HBSC survey of 145,671 13-15-year-olds, it was reported that drunkenness amongst young people was strongly linked to adult drinking patterns (Bendtsen et al., 2014).

5.2.5 ALCOHOL AND HEALTH

The association between alcohol and both acute (injury, traffic accidents, etc.) and chronic health concerns (cancer, high blood pressure, cirrhosis of the liver, mental health issues, etc.) is well established, with alcohol being a causal factor in more than 60 health conditions including premature death (World Health Organisation, 2014; Murphy et al., 2016a). One in every four deaths of young Irish men is caused by alcohol, compared with one in 12 for cancer and one in 25 for cardiovascular disease (Department of Health, 2012c). Overall, alcohol is responsible for more than 1,000 deaths per year in this country (Alcohol Action Ireland, 2016c). Public Health England cites alcohol as the biggest killer of people aged 15-49 years in the UK, and links it to potentially 200 illnesses (Burton et al., 2016).

Mental health risks caused by alcohol consumption seem to be amplified for adolescents compared with young adults (Dooley & Fitzgerald, 2012). Given that teenagers are affected twice as much by alcohol as adults, the developing teenage brain is particularly susceptible to the negative effects of alcohol (Burton et al., 2007).

The My World Survey investigated the association between students' alcohol consumption and depression, anxiety and stress for Irish university students (Dooley & Fitzgerald, 2012). Very severe depressive symptoms were reported by 3% of students labelled as normal drinkers, compared with 18% of alcohol dependent drinkers. Five percent of normal drinkers reported suffering from severe anxiety, and 1% suffered from severe stress. For those students deemed alcohol dependent, 31% suffered from anxiety and 13% from stress. The study also found that normal drinking behaviour, that is achieving a score less than 8 on the WHO's AUDIT survey, was linked to positive outcomes, including increased optimism, self-esteem and satisfaction.

Suicide rates amongst young Irish people are the fourth highest in the EU (National Office of Suicide Prevention, 2010). Suicide, the number one cause of death amongst men aged 15-24 in Ireland, is thought to be significantly influenced by alcohol consumption (Walsh & Walsh, 2011). A recent study reported that amongst people in Ireland who had died as a result of suicide, more than half of them had alcohol in their blood (Bedford, O'Farrell & Howell, 2006).

Most chronic non-communicable diseases linked to alcohol are not observed until well into adulthood, although some diseases can be reported earlier. The prevalence of alcohol-related liver disease in Ireland has increased threefold from 1995 to 2013, and this increase can be primarily attributed to 15 to 34-year-olds (Mongan & Long, 2016). The risk of alcohol dependence, a syndrome of behavioural, cognitive and physical symptoms, can be amplified in adolescence. If young people start drinking before they turn 15, they are four times as likely to suffer from alcohol dependence in later life (Grant & Dawson, 1997). This can then lead to a significantly increased risk of liver cirrhosis, cardiovascular disease and alcohol-related cancer in adulthood.

5.2.6 *GROWING UP IN IRELAND* AT AGE 17/18 YEARS

It is clear that alcohol poses a significant risk to the health, both physical and mental, of young people in Ireland. Alcohol consumption behaviour amongst adolescents, including age of onset, can have serious negative health effects in later life. However, alcohol consumption is a modifiable behaviour, so there is significant scope to positively affect consumption habits early in life with a view to protecting against potential long-term health concerns. Evidence suggests that parents can play a particularly important role in terms of affecting their children's alcohol use.

The survey of the ***Growing Up in Ireland*** child cohort at age 17/18 years aimed to investigate the alcohol consumption behaviour of both the children and their parents. Both groups were

asked several questions based on the World Health Organisation's AUDIT alcohol screening tool: age of onset, regular consumption habits, binge-drinking and negative effects of drinking too. By gathering these data for the cohort at this stage, and through longitudinal analysis of data already collected at 9 and 13 years of age, we can potentially add a wealth of high quality evidence to answer a number of important questions; for example: What is the average age of onset of our cohort and does this affect subsequent alcohol consumption habits and other risk behaviour? What are the key predictors of hazardous drinking behaviour amongst adolescents? Is there any link between alcohol consumption habits and negative health outcomes in our cohort, particularly mental health-related outcomes? Do adolescents' drinking habits reflect their own parents' drinking habits?

5.3 BLOOD PRESSURE AND CARDIOVASCULAR HEALTH IN ADOLESCENTS

5.3.1 DEFINING BLOOD PRESSURE

Blood pressure (BP) is a measurement of the force used by the heart to pump blood around the body. It is expressed in terms of two values, the highest pressure at which your blood is pushed through the arteries when your heart contracts (systolic BP), and the lowest pressure in your veins when blood returns to your heart as it relaxes (diastolic BP). It is typically presented as 'systolic/diastolic' e.g. 120/80. High blood pressure is called hypertension and is primarily asymptomatic; there are no signs or symptoms (Williams et al., 2002). Therefore, to ensure early diagnosis, it is recommended to measure blood pressure regularly (at least annually), starting as early as age three (National Institutes of Health, 2011).

5.3.2 DEFINING HYPERTENSION

Adult hypertension is defined as having a blood pressure reading consistently above 140/90, a marker based on the associated increased risk for cardiovascular events (Falkner, 2010). Pre-hypertension, the stage at which cardiovascular disease (CVD) risks begin to gradually increase, is defined as a blood pressure reading between 120-139/80-89. Unfortunately, similar risk-defined classifications of pre-hypertension and hypertension for children are not possible, given the somewhat limited evidence supporting an association with CVD risk factors in early life. The difficulty of establishing cut-offs for children is compounded by the fact that BP increases in conjunction with both age and height (Bourgeois et al., 2017).

As a result, childhood hypertension is based on internationally-established normal values, gathered by the National Heart, Blood and Lung Institute (Falkner & Daniels, 2004). The 90th percentile is used as a cut-point for pre-hypertension and the 95th percentile used as a cut-point for hypertension. These normal tables account for gender, age and height. Similar tables have been developed using data collected from UK children, although in this instance the 91st percentile is recommended as the cut-point for pre-hypertension, and the 98th percentile for hypertension (Jackson, Thalange & Cole, 2007).

There is limited evidence regarding established predictors of hypertension in childhood and adolescence. Overweight and obesity are the primary risk factors associated with hypertension; these are discussed in more detail in section 2.2. Similarly, parental history of high BP has been linked to childhood BP (Shear, Burke, Freedman & Berenson, 1986; Lauer, Burns, Clarke & Mahoney, 1991). Some evidence suggests that both breastfeeding and supplementation of formula with polyunsaturated fatty acids in infants are linked to lower BP (Martin et al., 2004; Din-Dzietham, Liu, Bielo & Shamsa, 2007), while some research has suggested that lower dietary sodium intake is also associated with lower BP for infants, children and adolescents (National Institutes of Health, 2011). Male sex (Dasgupta et al., 2006) and maternal smoking during pregnancy (Lawlor et al., 2004) have also been linked to increased childhood BP.

5.3.3 HYPERTENSION AND CARDIOVASCULAR DISEASE

High blood pressure (hypertension) is a key risk factor for cardiovascular disease (Williams et al., 2002), which can lead to heart attack, stroke, heart failure, or kidney disease. Cardiovascular disease (CVD) is the primary cause of premature death for adults worldwide (Chobanian et al., 2003) and accounts for 35% of deaths in Ireland (Central Statistics Office, 2007). While there is a clear link between hypertension and CVD risk factors for adults (Ettehad et al., 2016), less evidence exists regarding this relationship amongst children and adolescents. Even so, some studies have observed associations between childhood hypertension and vascular abnormalities, including increased carotid arterial thickness and left ventricular enlargement and thickening (Mcniece et al., 2007; National Institutes of Health, 2011).

Regardless of the presence of an association between hypertension and CVD in childhood, many longitudinal studies have reported that BP, including hypertension, tracks strongly from childhood into adulthood (Lauer & Clarke, 1989; Williams et al., 2002; Falkner, 2010). A systematic review of 50 cohorts confirmed that childhood BP is associated with BP later in life, highlighting the need for early intervention (Chen & Wang, 2008). If hypertension is either undiagnosed or untreated in childhood, those affected may ultimately present with hypertension-induced CVD risk factors in adulthood. Bearing in mind the potential long-term health implications, and coupled with the economic healthcare burden, measuring, treating and addressing childhood hypertension is an important issue.

Hypertension usually refers to primary or essential hypertension. There also exists secondary or inessential hypertension, which refers to a condition whereby severely elevated blood pressure is a secondary symptom of another medical condition or disease. It is more common in childhood than in adulthood and is usually due to renal disease or narrowing of the aorta (Hansen, Gunn & Kaelber, 2007). It is important to identify and evaluate secondary hypertension as early as possible to effectively address the underlying condition (Williams et al., 2002).

5.3.4 PREVALENCE OF HYPERTENSION

A lack of agreement on an internationally-established definition of childhood hypertension makes it difficult to predict prevalence worldwide. Limited evidence is available from an Irish perspective, although prevalence statistics have been reported from many international studies.

According to results from a study of US-based adolescents aged 12-19 (n=4,673), 2.9% of boys and 3.7% of girls were hypertensive, while 19.4% of boys and 6% of girls were pre-hypertensive (Shay et al., 2013). Another study involving 14,187 young people aged 3-18 reported pre-hypertension and hypertension levels of 3.4 and 3.6%, respectively (Hansen et al., 2007). A third US-based study of 6,790 11-17 year olds reported similar levels of hypertension (3.2%), although pre-hypertension was much higher (15.7%) (Mcniece et al., 2007). Gathering data from 55 studies and 122,053 children worldwide, a recent systematic review and meta-analysis reported that rates were even higher, 11.2% overall, 13% for boys and 9.6% for girls (De Moreas et al., 2014). Looking specifically at children in the UK, Jackson and associates found that levels of hypertension and pre-hypertension were 2.3% and 6.9%, respectively, based on their own cut-off points (Jackson et al., 2007). It has also been reported that pre-hypertensive children are at increased risk of progressing to hypertensive with two studies suggesting a progression rate of about 7% per year (Falkner, Gidding, Portman & Rosner, 2008; National Institutes of Health, 2011).

Looking specifically at Ireland, childhood BP has been investigated by both the Northern Ireland Young Hearts Study and the Cork Children's Lifestyle Study. The former study reported on BP levels of two cohorts, both at age 15 years, but measured 10 years apart (1990 and 2000) (Watkins et al., 2004). Interestingly, there was a significant decrease in the mean BP over time, dropping from 123.3/73.4 to 113.2/62.5 for boys, and 118.3/74.3 to 109.9/64.5 for girls. Unfortunately, this study did not present any data on the prevalence of hypertension in either cohort. The Cork Children's Lifestyle Study collected BP data from 1,075 local children aged 8-11 years. The prevalence of hypertension was 8% for the whole cohort, and mean BP was 111/65 (Keane, Kearney, Perry, Kelleher & Harrington, 2012).

No data are available at a national level for children or adolescents, although it has been gathered for Irish adults. In a study reporting results from the Irish Longitudinal Study of Ageing (TILDA), Murphy and associates found that almost 64% of adults aged 50 or more were hypertensive (Murphy et al., 2016a). Splitting the cohort by age, 53% of 50-64 year olds were hypertensive, compared with 74% of 65-74 year olds and 87% of those over 75 years old. Significantly, only 55% of those with high BP were actually aware that they were hypertensive. This figure compares poorly with other countries, with awareness of 64% in the UK and above 80% in the USA (Mosca & Kenny, 2014). According to The Survey Of Lifestyle, Attitudes And Nutrition In Ireland (Morgan et al., 2008), 60% of the 1,207 adults surveyed had high blood

pressure. Notably, only 43% of those with high blood pressure were on medication to treat the condition.

5.3.5 BP AND OBESITY

Significant differences in BP measurements according to weight status are frequently reported in child studies. An expert panel on cardiovascular health in young people recently cited increasing obesity levels as a key factor in the growing prevalence of hypertension for children in the United States (National Institutes of Health, 2011). This is supported by evidence from the NHANES study of an increase from 2.7% in their 1988-94 cohort to 3.7% in their 1999-02 cohort, primarily explained by rising obesity levels (Muntner, He, Cutler, Wildman & Whelton, 2004). Hansen and McNiece, both previously mentioned, reported higher BP scores amongst obese children, with combined prevalence of pre-hypertension and hypertension 30% (boys) and 23-30% (girls) amongst obese children in the latter study (Hansen et al., 2007; Mcniece et al., 2007). In Ireland, significant differences in the prevalence of hypertension were observed when the Cork Children's Lifestyle Study cohort was split according to weight classifications; 7% for normal weight, 8% for overweight and 20% for obese children (Keane et al., 2012).

However, the theory that increasing incidence of overweight and obesity will lead to an increase in hypertension levels has been refuted in a recent systematic review and meta-analysis (De Moraes et al., 2014). Across 55 studies, the prevalence of hypertension was inversely related to study year, despite the fact that obesity levels seem to be increasing for young people (De Moraes, Lacerda, Moreno, Horta & Carvalho, 2011). Similarly, the decrease in BP levels in the Northern Ireland Young Hearts Study was observed despite an increase in obesity levels over time (Watkins et al., 2004).

Looking specifically at the ***Growing Up in Ireland*** Child Cohort, weight status, as defined by BMI, was measured at age 13. Overall, 74% of children were normal weight, 20% were overweight (18% of boys, 22% of girls) and 6% obese (5% of boys, 8% of girls). These levels had tracked quite strongly from previous measurements at age 9; 65% of overweight 9-year-olds were overweight or obese at 13, and 89% of obese 9-year-olds were either overweight or obese at 13. These trends suggest that current levels of overweight and obesity will continue to track through late adolescence and into adulthood. It is worth noting that while overall levels of overweight and obesity have remained fairly steady, there is movement at an individual level (with some children moving from normal weight to overweight/obese and others moving in the opposite direction). This suggests that there is scope to investigate factors associated with those moving in either direction.

Other Irish studies have reported that levels of overweight and obesity in Irish schoolchildren may have plateaued at 20-34% (Keane et al., 2014). Regardless, these levels are deemed to be too high and should be closely monitored in conjunction with associated CVD risk factors such as hypertension.

5.3.6 *GROWING UP IN IRELAND* AT AGE 17/18 YEARS

Measuring blood pressure in the ***Growing Up in Ireland*** child cohort at age 17 years has allowed us to gather the first set of nationally representative data on blood pressure and hypertension prevalence for young people in Ireland. While a number of Irish studies have collected regional BP data, to date no studies have collected or presented adolescent BP data at a national level. In doing so, ***Growing Up in Ireland*** can provide baseline data for BP levels in this cohort, and adolescents in general throughout Ireland. These data will be extremely beneficial for a number of reasons, including the identification of characteristics associated with a risk of developing hypertension in adolescence/early adulthood.

In terms of those deemed to be at-risk, analyses of GUI data can further explore the predictors of childhood and adolescent hypertension in Ireland. As previously discussed, childhood overweight and obesity and parental history of hypertension are established predictors of childhood hypertension (Shear et al., 1986; Lauer et al., 1991). The extent to which these factors predict hypertension in this cohort can be examined through longitudinal analysis of such data from previous waves of the study at 9 and 13 years of age. The nature of the association with other developmental and behavioural factors can also potentially be explored; including breastfeeding, maternal smoking during pregnancy, and the child's sex.

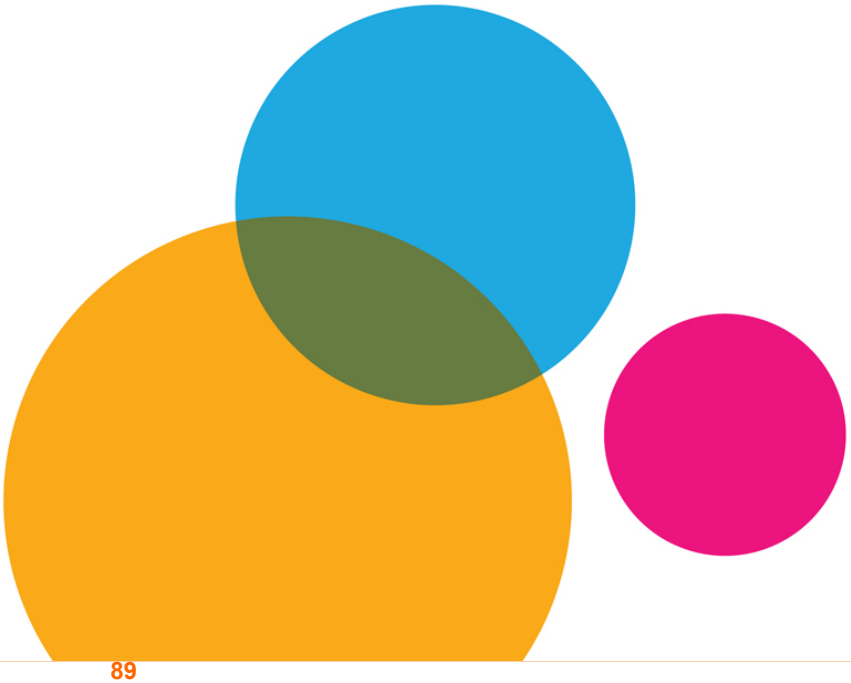
Looking forward, through longitudinal investigation there is scope to assess the extent to which blood pressure levels track from adolescence into early adulthood in the ***Growing Up in Ireland*** cohort. Also, while some signs and symptoms of cardiovascular disease present themselves in childhood and adolescence, they are increasingly likely to be experienced later in life. Measuring blood pressure from adolescence and tracking health parameters into early adulthood could potentially help identify the long-term cardiovascular implications of adolescent hypertension for young Irish adults.

Ultimately, by measuring BP amongst the child cohort at 17/18 years of age, the data can aid the development of policies and interventions to combat hypertension amongst Irish adolescents. Key to this is increasing awareness regarding the risk and prevalence of hypertension.

Interventions to combat high blood pressure, addressing diet and physical activity for both the child and their family, could be informed by the data collected by GUI. Establishing the prevalence of hypertension amongst Irish adolescents should stimulate policies to address this issue as early as possible. In doing so, there is scope to potentially aid in the reduction of the health and economic burden associated with hypertension and associated negative health outcomes in later life.

Chapter 6

CONCLUSION



6 CONCLUSION

6.1 THE CHILD COHORT AT A CROSSROADS

A recurrent theme in many of the topics discussed in this review is the sense that the members of the Child Cohort are standing at a crossroads in their respective life-courses. They are at a transition point where decisions, social structures, micro- and macro-level factors, and behaviours will influence them towards adult life trajectories. Most obviously these influences and decisions are seen in relation to post-school choices: whether to proceed to third-level education, go into further education or training/apprenticeships, or enter the labour market, what course, where to study or which employer. Course choice at this stage may be an important factor in terms of impacting life trajectories, as the time and financial cost of returning to college at a later date makes this decision difficult, albeit not impossible, to reverse.

There are other aspects of life that are also at something of a crossroads. Many of the cohort are in the process of negotiating some of life's key milestones: leaving school and home (even if only Monday to Friday), getting a driving licence, working, being able to vote and perhaps taking on roles with significant responsibilities. In terms of relationships, some young people may make an early commitment to a partner or to having children that will influence their emotional, educational and even financial outcomes. Relationships with school-friends may yet last for several years but others will fade as individuals pursue different paths, and friendships do not survive the removal of school as the common ground. The dynamic of the relationship with parents may change as young people both assert their maturity and parents recognise that their child is now, or will shortly become, a legal adult; in some families, however, the parent-child hierarchy may remain - especially where the 17/18-year-old remains financially dependent. Both parent and peer relationships, and possibly romantic ones too, are likely to be impacted by whether the cohort member remains at home or moves out to independent accommodation – perhaps many miles away.

Even in the area of health this is a time where decisions and behaviours can have long-lasting consequences. As young people acquire more independence, their attitudes to drinking, smoking, drug-use and sexual health can have short-term as well as longer term implications. Drinking alcohol, in particular, is very prevalent – even excessive consumption is relatively common – and while conditions such as liver disease may be further down the road, there are more immediate risks from injuries sustained from falling while drunk or drink-driving. Additionally, patterns of lifestyle behaviours in terms of diet and exercise, and active health monitoring will likely have important implications for cardiovascular health in later adulthood.

But the importance of these crossroads should not be viewed just in terms of risk; in many ways this is a time of great opportunity. Young people may be able to elevate themselves to a better standard of living, through education, than their parents were in a position to provide. Individuals who have endured an unhappy home life could find a sense of relief and joy in

their new-found independence. A sense of boredom with school may be replaced with new fulfilment in a job or course of study that is much more interesting. While the enormity and proliferation of choices facing young people at this stage may be experienced as stressful or overwhelming, many will likely reflect on this period in later life as a positive phase where they were able to balance increased agency with continued support from their family.

The young person's perspective on the changing national and global context in relation to, for example, the appeal of spending a year abroad, their involvement as voters or volunteers, or making significant financial decisions could mean that the exo- and macro-systems of Bronfenbrenner's conceptual framework influence development more directly than earlier in the life-course (see, for example, Bronfenbrenner & Morris, 2010). Individual-level data from ***Growing Up in Ireland*** can be considered in the context of other national and international statistics to aid interpretation of decisions and outcomes at this, and at later stage, of the life-course.

6.2 THE IMPORTANCE OF EARLIER EXPERIENCES

At the same time as considering the potential for the future and the importance of decisions made at this transition phase at 17/18 years, longitudinal researchers must also consider the path leading to this turning point. There are major differences in the early experiences of the cohort which shape their capacity to make decisions about their future and realise their full potential.

Some of these are most telling in the area of education. The social structures within which each young person is embedded moderate their access to opportunities. Individuals may not always be able to achieve their desired future path, although an expansion of further-education opportunities in Ireland (such as Post-Leaving Certificate courses) means that sometimes an indirect pathway can be taken to the same goal. Nonetheless, the major determinant of choice of study is performance in the Leaving Certificate examination but this in turn will be affected by many factors outside the student's control: some of which are agentic, such as the young person's own degree of expectation, effort, and motivation, the level of encouragement he or she received from parents; and others are more structural such as the parents' access to networks ability to purchase private education, , the quality of the teaching received from educators, and many others (Schoon, 2018). In addition, there are the student's individual characteristics such as self-control, academic ability, meaningful engagement with learning and study; which, while malleable, were forged in the wider school and home context. In relation to the issue of early school leaving, for example, it was noted in this review that there is typically a 'fading out' of engagement with school rather than a sudden decision to leave and that this outcome is linked to a range of family and individual characteristics frequently associated with socio-economic disadvantage. Research in this area using the ***Growing Up in Ireland*** Child Cohort has already identified a continuation of negative

attitudes to school between 9 and 13 years, suggesting that disengagement with school can start as early as primary level (Williams et al., 2018).

In other domains, it was observed in this review that, for example, parental modelling influences the drinking behaviour of young adults and previous research with the ***Growing Up in Ireland*** Infant Cohort demonstrates parental smoking in the pre-natal period increases the risk of low birthweight, itself a risk factor for other developmental outcomes (Layte & McCrory, 2014). Obesity in early life, previously identified as an issue for this cohort (Layte & McCrory, 2011), is a risk factor for the early onset of cardiovascular problems. The pervasive and deleterious influence of family socio-economic disadvantage is a recurring theme, but it is not always clear through which mechanisms this operates.

Growing Up in Ireland is well-placed to consider outcomes at this stage of the life-course in the context of earlier experiences. In-depth interviews were conducted with the cohort members and their parents at 9 and 13 years of age, teachers completed detailed questionnaires at 9 years and school Principals provided information on school characteristics at all waves. Although not a birth cohort, parents provided retrospective information on other characteristics such as birth-weight and breastfeeding experience at the first wave. This design facilitates a broad and longitudinal perspective using multiple informants.

6.3 WHAT NEXT?

The Child Cohort will be next visited at age 20 years. Although still in the planning phase at the time of writing, this follow-up should allow researchers to consider the short-term impact of choices made at age 17/18 years and the level of satisfaction with these choices. In addition, it will have the potential to contrast behaviours and attitudes in the period where most individuals will still be on that 'cusp' of adulthood with the phase after the transition from school and where most will have embarked on a new course of study or have found employment. A key research question will likely be the extent to which 20-year-olds will have actually moved into independent adulthood – and what factors from the age 17/18-year interview, along with earlier waves, will have influenced their well-being on a range of measures.

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Appendix:

BACKGROUND TO UPPER SECONDARY EDUCATION AND APPLYING FOR THIRD LEVEL EDUCATION IN IRELAND

8 APPENDIX: BACKGROUND TO UPPER SECONDARY EDUCATION AND APPLYING FOR THIRD LEVEL EDUCATION IN IRELAND

Post-primary education in Ireland consists of a lower secondary three-year Junior Cycle, which begins when young people are approximately 12-13 years old. At the time when Cohort '98 was completing junior cycle, this phase of education culminated in state examinations called the Junior Certificate[27]. While a certain level of attainment at Junior Cycle is not a compulsory requirement to undertake Senior Cycle, subject level take-up and grades can influence access to subjects and subject levels at Senior Cycle. Young people are legally required to stay in full-time education until the age of 16, or the completion of three years of junior cycle, whichever comes later. Senior Cycle begins when students are approximately 15 years old, and includes an optional Transition Year, which directly follows the Junior Cycle. Transition Year is designed for students to experience a wide range of educational endeavours, including work experience, without the pressure of examinations. The rest of the Senior Cycle is comprised of three different two-year Leaving Certificate Programmes. The Established (traditional) Leaving Certificate, taken by 68 per cent of the cohort in 2014, includes more than 30 subjects that students can choose from. It is compulsory for Leaving Certificate students to study Irish, unless they have been granted an exemption because they have a learning disability or completed their primary education outside the State. Schools may also set their own specifications on compulsory subjects beyond those requirements for their students. Students normally study 6 or 7 subjects; however, some may choose to take on further subjects. The Leaving Certificate Vocational Programme (LCVP), taken by 27 per cent of the cohort, is similar to the traditional Leaving Certificate; however, it includes additional "link" modules with a more vocational focus. Students taking the LCVP programme must take a minimum of 5 Leaving Certificate subjects, of which one must be Irish (unless exempt), and a continental language.

While some subjects in the Leaving Certificate offer the opportunity to gain marks through practical coursework or oral examinations, the bulk of marks are awarded on the basis of performance in the two-week examination period at the end of the Senior Cycle. The results of the LCE and the LCVP are converted into 'points' for the purposes of higher education entry through the Central Applications Office (CAO) system, where a specific number of points are awarded on the basis of subject level (higher or ordinary) and grade received. In 2017, the grading system was changed with the use of eight grades at higher and ordinary level, different naming conventions (for example, 'H1' rather than higher 'A1'), changed points allocation for ordinary level and the award of points for what was formerly considered a higher level 'E' grade. The link modules are assessed on the basis of a portfolio of coursework and a written examination, with the number of points allocated for the LCVP link modules differing from those for other subjects. The total number of points for entry purposes are taken from the exam results in a single sitting, rather than over a period of time. Because of differences in the year in which Cohort '98

[27] Subsequent reform of the junior cycle has involved greater flexibility at school level to combine full and short courses, the use of Classroom-Based Assessments and the move to a common level for all subjects except Irish, English and Maths.

did their Leaving Certificate, some were allocated points under the old system and others under the new system.

The third Senior Cycle pathway, the Leaving Certificate Applied (LCA), is designed for students whose needs are not adequately catered for by the other Leaving Certificate programmes and in 2014 was taken by five per cent of the cohort. It differs from the other two programmes in offering a combination of general education, pre-vocational education and vocational preparation courses. The approach to assessment is also quite distinct, being based on completion of modules, the performance of tasks and achievement in the terminal exam with a single award (pass, merit or distinction). Unlike LCE and LCVP, the LCA qualification is not recognised for direct access to higher education. Post-school options include higher (third-level) education, further education and training (which is comprised of Post-Leaving Certificate courses, apprenticeships and other courses such as Youthreach for early school leavers) and direct entry to the labour market. Post-Leaving Certificate courses vary in length from one year to three years and are provided in colleges of further education or second-level schools. Many PLC courses lead to a level 5 or 6 qualification on the National Framework of Qualifications and these qualifications can be used to access (some) higher education courses. The apprenticeship scheme is organised around competency-based standards with a modular structure. The on-the-job phases are funded by employers while the off-the-job phases are funded by the state. Cohort '98 left school in a context where the number of apprenticeship places was increasing and apprenticeships were being introduced in new subject areas.

Entry to higher education (universities or institutes of technology) is carried out through a centralised application process (run by the Central Applications Office, CAO). Applicants may specify up to ten choices for level 8 courses (Honours Degree), and ten choices for level 6 and 7 courses (Higher Certificate and Ordinary Level Degree respectively). Students must rank them according to preference, and courses are selected by order of ranked first preference, eligibility for the courses using the points system[28], and course requirements. A change of mind facility is available to students who are applying through the CAO system. This facility exists on the CAO website and can be used until the deadline of the first of July. Higher education institutions also maintain entry (matriculation) requirements, as well as course requirements, which may involve minimum grades in English, Irish, Maths, or another language, as well as overall requirements for specific grades at higher or ordinary level.

[28] The points system is based on demand for courses and the points for courses therefore fluctuate from year to year, depending on how many places are available, popularity of courses, and course entry requirements.

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